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TABLE II/5 (*continued*)

Activity	*Total hours*	*Percentage contrib.**
Both		*Men*
Paid work	1,128.8	56
Other crops – harvest	1,109.0	54
Sick – personal	442.6	53
Yam – harvest	412.6	53
Coffee – process	398.4	53
Collecting firewood	234.1	52
Social obligations – mourning	783.9	51
Other crops – market	66.9	51
Church services	1,946.2	46
Meetings	898.7	44
Fishing	165.0	44
Council work	824.2	42
Taro – maintain	2,551.6	37

* Where one sex carries out more than two-thirds of the work and where the total amount exceeds .01 per cent (29.0 hours) of the total hours active for the whole sample.

there is a ritual prohibition, for which I shall later quote the mythological charter, to hold a feast at all.

In any case, there seem to be two basic limitations to the size of a feast. First, the custom of restricting the number of guests to the inhabitants of *one* village, usually of about the same size as the inviting village. There are of course many variations to this custom but the principle of limitation is usually present. Secondly, the generosity shown to the guests, though outwardly most impressive, is restricted by the amount the guests can physically carry away. Though the food lying on the feasting platform looks inexhaustible to the observer, and the guests are capable of carrying away a heroic amount of food after a feast, the overall economic impact is minor.

Waddell remarks most interestingly that, in comparison with the main crops (taro, bananas and sugar-cane), a far higher proportion of dry season crops enter the exchange network. This applies especially to sago, breadfruit, sweet potatoes and yams. Waddell does not discuss nuts, but these are often given to friends and function as the small change of sociability. Both *tauga* and *puga* are stored for the season of shortage; betelnut is a traditional trade item. All vegetable produce is nowadays considered suitable for marketing. Villages near Popondetta have far more opportunity to sell or barter produce than the villages on the Mount Lamington foothills.

It is customary for animal food to enter the exchange network, either as a gift or as part of a festive meal to which guests are invited. Meat is ceremonial food, eaten for instance to mark the settlement of a quarrel. It is considered somewhat

[TEXT CONTINUED ON PAGE 31]

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improper to eat meat without introducing some element of gift exchange, very much like 'party food' in our own society.

In general, people take any wood they need from their own land. The only record I have of transactions involving wood concerns the obtaining of less common building materials for houses. My informants made a clear distinction between gifts of bush trees and gifts of sago. The former kind create no specific debt but whenever sago is taken a return gift is expected, because, I was told, sago is a cultivated plant.

With regard to feathers and *hambo*, attitudes differ as between areas where raw materials are plentiful and areas where they are rare. On the Mount Lamington foothills they seldom enter the exchange network – perhaps once a generarion, during a ceremony of uncommon importance. On the alluvial plains, they are a frequent trade item.[8] Of other items of traditional trade, betelnuts and lime are the most important. Betelnut grows only on the foothills; lime is made of shells collected on the seashore. It was, and is, therefore common to exchange one for the other, as betelnut can be chewed only together with lime and betelnut chewing is as popular a social activity among the Orokaiva as it is throughout New Guinea and Indonesia. A peppery plant called *hingi* (piper betel) is always chewed with the other two ingredients. This again grows best on the hills, so that it is often exchanged with the betelnuts. The alluvial plains are in a poor bargaining position with regard to the betelnut complex as they produce none of the ingredients from their own land. It may be partly for this reason that they are accustomed to accumulating animal products and to using these as objects of trade.

By far the largest number of exchanges take place within a village, only a minority of transactions occurring between members of different village

TABLE II/7

ACQUISITION OF 'HAMBO' AND 'DI'
(*Source*: Crocombe and Hogbin 1963: 51; Rimoldi 1966: 80)

	Sivepe		*Inonda*	
	Hambo	*Di*	*Hambo*	*Di*
Inheritance, cash value ($)	48.40	17.60	18.60	5.70
Percentage	53%	40%	17%	12%
Cash Purchase, value ($)	9.30	4.50	36.10	2.00
Percentage	10%	10%	33%	4%
Bride price or other exchanges, value ($)	17.70	6.50	48.30	17.90
Percentage	19%	14%	44%	38%
Made or caught, value ($)	16.60	15.40	5.90	21.10
Percentage	18%	35%	5%	45%
Total, value: ($)	92.00	44.00	108.90	46.70

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439 communities. When these do occur they are usually between neighbouring
437 communities, as Waddell and Krinks have clearly demonstrated.[9] Intertribal
trade, though small in volume, was politically important in that it provided a
438 motive for terminating, or at least interrupting, warlike disputes. Intertribal trade
[628] was mainly in animal products, betelnut ingredients, feathers, *hambo*, and certain artifacts which were known to be of high quality in particular districts, e.g. Binandere pots were exchanged for Yega loincloths; only mountain people could supply cassowary feathers, and so on. Such exchanges may, under modern conditions, take the form of gift exchange, barter or sale but it may be doubted whether barter was ever as clearly institutionalised and differentiated from gift exchange among the Orokaiva as is the case in many other parts of Melanesia.

433 *Money.* With a few reservations, one could describe the role of money in
436 the modern Orokaiva economy in much the same terms as Salisbury used for the Siane (1962). Salisbury distinguishes between three nexuses of activity. One is concerned with the production, distribution and consumption of subsistence goods, another with luxury goods and a third with ceremonial goods. The three nexuses involve not only categories of goods but also different types of social
436 groups. Among the Orokaiva as among the Siane, money mainly enters the
454 luxury and ceremonial nexuses. As with the Siane, the Orokaiva tend to store pound notes in treasure boxes, with *di* and *hambo*, and to keep them for special purposes which are often ceremonial (payment of brideprice, giving of feasts and
436 church donations), but sometimes utilitarian (payment of taxes). Purchases in
trade stores are mostly for luxury items, i.e. objects which the Orokaiva use only
439 when there are guests to be entertained (tinned meat and fish, sugar, tea,
[262] batteries, cartridges, kerosene and tobacco, for example). Foods like rice, bread and flour are classifiable as luxuries among the hill people, as here they are used exclusively as guest foods. It is clear, however, from Waddell and Krinks' statistics that on the alluvial plains near Popondetta, rice and flour is bought in far greater quantity in months when taro is in short supply. These products are thus taking the place of subsidiary crops. People in this area prefer to make money from cash crops and services and to spend some of their cash on supplementary staples. The Siane, at the time of Salisbury's research, did not depend on cash as a source of staple food.

171 The use of money for capital goods merits some attention. Salisbury defines
436 capital as a stock of goods, present before a productive act is performed, used in production and 'immobilised' from direct consumption while the act is in
439 progress. Tools and implements are classed as 'durable instruments of produc-
511 tion.' Houses and clothing, etc., are called consumer's capital because they 'produce' services for their owners while they exist. It is interesting to compare, in respect of monetary input, everyday consumer goods and the types of capital just mentioned. While the former have generally remained outside the cash economy, it is precisely in the sphere of capital goods that the traditional industries have been largely or wholly replaced by cash-purchased innovations such as trade, store clothing, agricultural, hunting and cooking implements. Totally new items – radios, flashlights, wrist watches, pressure lamps, sewing machines and guitars have been added. Locked suitcases, for the storage of valuables, are very popular, indicating that safe storage used to be a vexing problem.

Most of these capital goods enter the village by gift or gift exchange. Some types (e.g. kitchenware and clothes) may pass from one village to another by way of brideprice, but other types of gifts (e.g. radios) are hardly ever made in a ceremonial context, but only to close kinsmen. I am not at all sure whether, in Salisbury's terminology, the latter type should be classified as a luxury or a ceremonial item.

One conclusion emerging from the various studies made in the 1960s is that total village income has risen rapidly among the Orokaiva. The sources vary. it may be due to outside employment of persons still ordinarily resident in the village, to increased cash cropping, to sale of food surpluses or to increased remittances from local men employed away from the village.

4. *History*

The main object of this section is to provide some background for the study of Orokaiva exchange, especially between tribes and between Orokaiva and Europeans.

In physical constitution, Williams considered the Orokaiva to be 'midway between the typical Papuan and the typical Melanesian'. Dupeyrat, who has recently (1965) surveyed the evidence, considers the Orokaiva 'basically of the Papuan Mountain type', but mixed with Polyno-melanesian elements, late-comers in Papua, who spread to the Northern District via Maisina and Manigela. It is certainly true that one notices more Polyno-melanesian features along the coast (e.g. among the Yega) than inland.

In the period just prior to European occupation, the most notable aspect of Orokaiva history that can be reconstructed is pressure from the dense population on the Mount Lamington foothills upon the sparser populations surrounding the mountain on all sides, but especially to the north and east. These sparser populations (to whom Williams gives the common name Sauaha) pressed upon the still sparser populations dwelling in the still less fertile country on their own northern and eastern borders (see Chinnery and Beaver 1916; Williams 1930: 152–4; Monckton 1921: Ch. XXIV; Crocombe and Hogbin 1963: 14–16).

In 1888, in response to Australian pressure, the British government annexed Papua. The first administrator, Sir William McGregor, made many arduous exploratory expeditions while establishing his rule in this vast unknown territory. On one of these expeditions he ascended the Mambare river to its highest navigable point, a few miles above Tamata creek, where he discovered the existence of gold in the sand and shores of the river (Monckton 1921: 78; Murray 1912: 326–8). This was the first discovery of gold in Papua with important commercial prospects, and led to a major movement of prospectors and miners to the Northern District. Relationships with the Papuans were bad from the beginning, and there were numerous killings by both sides. In 1900 150 miners were working on the Yodda river; the Yodda and Gira goldfields together produced 15,000 oz. of gold (Murray 1912: 333). In order to stop the bloodshed, resident magistrates were stationed at Ioma, along the Mambare and at two places on the Kumusi river, which was for some years the access route to the Yodda field.

The early relationships between Orokaiva and Australians may be gleaned

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their home country. American troops, by their equal treatment of Negro soldiers, created the impression that racial barriers had no place in their society! The troops' friendliness to the Papuans was tangibly expressed by gifts, not only of tobacco and other small luxuries, but also of discarded tools and equipment still used in villages today. It is in these events that the Orokaiva saw the portent of the coming of a new era.

The Eruption of Mount Lamington. In 1951, a Peléan eruption occurred on Mount Lamington. The *nuée ardente* produced by this eruption completely devastated a surrounding area of 68 sq. miles (Taylor 1958). Almost 4,000 people were killed and there were hardly any survivors of the numerous Sangara tribe. Those who did survive were provided with food, medicines and other comforts by the government and were for some time maintained in evacuation camps. The evacuees were not at once allowed to return to their villages as the authorities feared further explosions in the mountain. Some officials saw in this sequence of events a chance to create Papuan model communities with up-to-date socio-economic institutions. These plans for village reform, whatever their merits, were not realised at that time, partly because the danger of further explosions was soon greatly reduced, in the view of vulcanologists, so that the people were allowed to go back to their old village sites; partly also, because the reforms were not favoured by the Australian administration which assumed power after the defeat of the Labour Government in 1951.

Intensification of Development Policy. Large scale, expertly planned social, economic and political development did not start in Papua until around 1960 (Parker 1966:189). In the economic sphere the first major development success was the building up of a coffee industry based on the production of indigenous growers using their own village land. While by far the largest quantity of this coffee is grown in the Highlands, the yield in the Northern District was enough to assure to any Orokaiva who entered the scheme an income of something like $60–100, in the year 1966–67. During that year all the villages I visited, both on the foothills and in the plains, were producing coffee. It was an activity in which any able-bodied man resident in a village would normally engage to a greater or lesser extent. Several factors aided the development of this industry.

Agricultural extension work to train the population of the Northern District in coffee growing began immediately after the eruption. A training school was set up in Popondetta. Papuan agricultural assistants were trained to give basic instruction and to distribute seed. These assistants spread knowledge not only while they were employed by the government, but even more when they went back to their villages and grew their own coffee.

Title improvement work is also beginning to contribute to agricultural development. Until 1956, the government kept entirely aloof from indigenous tenure problems and passed no ordinances enabling it to adjudicate in land disputes. By that time, however, it had become obvious that commercial arboriculture could be developed only to a limited extent unless a land registry was introduced and the traditional Orokaiva principle of maintaining residual rights in land was adandoned. Though the first attempts to change the land tenure system were unsuccessful, in 1967 it looked as though a very satisfactory procedure had been worked out. (See Ch. V.)

Road improvement was another necessary preliminary to significant village

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222 4 Orokaiva: *tauga*; botanical: *cycas media*; Orokaiva: *puga*; botanical: *terminalia okaria*. There are two varieties of breadfruit, called *oga* and *eumba*. They are both somewhat unusual but I failed, in spite of sending samples, to obtain indentifications.

241 5 Details of garden production are given in Table II/3. Rainfall at Sivepe and Inonda is shown in Rimoldi 1966:109; Crocombe and Hogbin 1963:100.

342 6 A plan of a contemporary Orokaiva house is shown in Fig. 3. Recent changes in house design, house construction and domestic amenities are summarised in Table II/4.

462 7 See Tables II/5 and II/6. Williams' data are taken from an unpublished manuscript and appeared first in Schwimmer 1969:226. I have discussed the Orokaiva division of labour in more detail in Schwimmer 1969: 145–50 and explained the apparent discrepancies between Williams' table and Waddell's and Krinks' statistics.

439 437 8 Crocombe and Hogbin (1963) provide a list of prices prevailing in this trade. They report that there is still some trade in shell ornaments from the coast and in feathers for head dresses from the mountains. Informants at Eroro, on the coast near Buna, gave me details of their traditional trade with Managalasi of the nearby mountains. A Sivepe man who has hunting rights to land near Ajoro goes there to hunt birds and sell the feathers. His chances of finding any of the more valuable birds near Sivepe are remote. The difference in Sivepe and Inonda patterns (i.e. the foothills and the alluvial plains) appears from the data in Table II/7. It will be seen that Sivepe stock is to a far greater extent inherited, whereas Inonda stock is to a far greater extent acquired through brideprice (value $13), barter (value $21.60) and other exchanges (value $13.70).

439 438 437 9 Dr. Waddell has provided a detailed statistical table of the geographical distribution of subsistence produce (Waddell and Krinks 1968:218). This table provides clear and detailed information on the geographical range of the Sivepe exchange network. A full descriptive account may be found in Schwimmer 1969: 41–69.

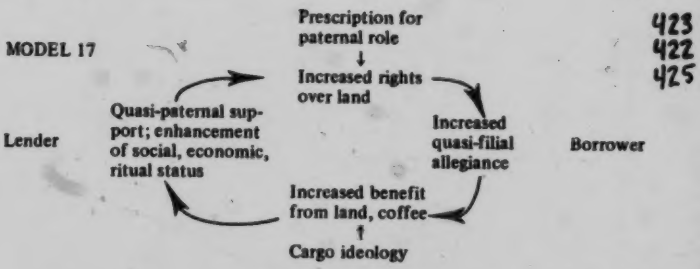
648 10 An interesting picture of this period of Orokaiva history is drawn in Beaver, 1916.

795 11 Full information on these cults will be found in Chinnery and Haddon (1917) and Williams (1928). If has escaped previous commentators that Bia, who started the taro cult, was employed for some years by Monckton, and participated in various punitive enterprises with an alacrity most pleasing to his master. He was described in Monckton's books in rather revealing detail (e.g. 1921: 185, 268, 269, 295, 308; 1922: 10, 13, 65, 136, 172, 214, 216). For the present relationship between the Orokaiva and the missions, see Schwimmer 1969; 123–33.

871 872 797 657 648 12 The general subject of Orokaiva economic development since 1951 is very fully covered in numerous bulletins published by the New Guinea Research Unit from 1963 to the present, and also in Schwimmer 1969. A general indication of the investments in socio-economic development is given by a table of public expenditure in the territory of Papua for the years ended 30 June 1961 to 1965 (Commonwealth of Australia: *Annual Report of the Territory of Papua for the period 1 July 1964 to 30 June 1965*, 179). The growing emphasis on educational services is perhaps the most notable aspect. Table II/8 indicates the pattern of school attendance. Table II/9 summarises the activities of the Higaturu Local Government Council; roads, water supplies and clinics are perhaps the projects most relevant to development.

101 13 The three villages have been sketched in figures 4, 5 and 6. Education and occupational experience at Sivepe and Hohorita are analysed in Tables II/10 and II/11.

MODEL 17



The argument of the Tandai'undi and other owners of coffee-producing land is that the production of coffee gives the occupiers increased rights over land so that they owe an increased quasi-filial allegiance which must be expressed in increased prestations. These may take the form of substantial gifts, a share of the crop, etc. The benefit the owners seek to obtain from the land is nearly always money.

It may seem far-fetched that my model shows 'cargo ideology' as the 'mythological charter' for this desire for money. It may even be argued that the desire for money requires no ideological explanation. Without entering upon this larger question, I would directly relate the significance given to money in Orokaiva ideology to what has been said in the previous chapter about Jesus Christ as a *dema* figure. It is He who is credited with the introduction of money into the world and this is regarded as perhaps His greatest blessing. Hence the pursuit of money is not despised by Orokaiva nor even viewed as morally neutral: to acquire money is to give evidence of having followed the precepts of the *dema*. If the mysteries of the *dema* were more fully revealed to the Orokaiva, they believe they would acquire a great deal more money.[4]

I would argue that the Orokaiva regard the coffee industry as a premonition of greater wealth and power that may later come as the result of the return of the ancestors. Until the coffee industry started, Orokaiva could earn money only by leaving their villages to work for white men. Suddenly it became possible to obtain equivalent amounts from the products of village soil. What stirred the imagination was that a man could go to his garden, pick the coffee and then, after a not too demanding ritual of processing, pour it into a bag and obtain money for it. This was not classified as work but as a kind of magic. *Work* (the Pidgin English word) referred exclusively to paid labour done for an employer. *Pure* referred more specifically to the traditional gardens. *Kapi* (coffee) was what one might compare to a 'money tree': it was the source of the benefits which enabled a village family to share in the 'new day'.

From the cases I observed at Mumuni and Sivepe I gathered that some modest proportion of the proceeds of the coffee garden (like a tithe) would not satisfy the owners of the land upon which coffee was grown by useholders. They seemed to want all, or nearly all, the cash that could be gathered from the bushes. It was because their claims were immoderate that I began to think of the influence of cargo ideology.

Production and income

433 241 While official reports give laziness or misunderstanding as the reason for the lack of willing co-operation with the scheme, the reason given today by the people themselves is that the income was inadequate for the effort required.

[435] Table 1 shows the total production of coffee from plantations established under the ordinance in the Orokaiva area for the ten year period 1931-40, and the amounts paid to producers for it. The price per pound has been calculated and ranged from 4.5 pence (in 1932) at the highest to 2.1 pence (in 1938) at the lowest. The average price for the period was 2.6 pence per pound.(1)

433 434 245 [465] Table 2 shows that output per acre of land planted in coffee under the scheme averaged 681 pounds, which is a relatively high yield. At 2.6 pence per pound this would have given an income of £7.7.5 per acre. The total work force on all the plantations is estimated to have been about 700, so payment would have averaged £1.11.0 per worker per year, or less than 2 pence per day worked. The 15½ acres of coffee in the Ongoho block(2) would, assuming average yields, have given an annual income of £114.5.0, or just over £1.0.0 per worker, but informants today maintain that payment at Ongoho was usually 8/- to 12/- per man per year with young lads being paid 5/-. [464] Only on one or two occasions did the payout exceed £1. The total labour force in the nine villages which participated in the Ongoho block was probably close on 100 and yields per acre 465 were apparently lower than average. Enquiries at other communal plantations show that higher prices were paid in places where a smaller labour force was working an equally large [466] area. In Hohota, for example, £6 to £9 was paid per man in some years, but there the hours of work are said to have been 6 a.m. to noon six days a week, plus afternoon work at harvest-

[439] (1) The world trade depression had begun about the time the first coffee was coming into full production. The crop was marketed in Australia where it met strong competition from Java coffee.

(2) Our measurement of the planted area shows it to have been just over 15½ acres, though the area gazetted was only 15 acres.

[TEXT CONTINUED ON PAGE 17]

436 a standard of value. However, to some extent money seems to have [555] taken over some of the functions of traditional valuables and in some situations one is exchanged for the other. In the past it [301] was recognized that skill and initiative in hunting and trading [237] were necessary to acquire di hambo but today, with safer communi- [321] cations and better hunting equipment, they are more easily obtained. People are willing to buy some of the more valuable items or some [439] cheaper items of European manufacture which can be adapted to serve as a novel decoration.

Although they constituted the greater part of the goods changing [428] hands on traditional ceremonial occasions, di hambo are evidently not now circulating rapidly. A little less than half of these valuables held by members of the sample had been inherited and nearly a quarter had been acquired by the owner by hunting or collecting.

A complete adjustment between the roles of money and of non-monetary valuables has not yet been made. They circulate in the same exchanges and both are considered essential; it may now be [583] accepted practice that each should be contributed by or distributed amongst different categories of kin on these occasions.[1] But the opinion was widely expressed that as people are increasingly demanding cash as a large part of bride price payments, the intrinsic value of these exchanges was correspondingly less.

435 Although money and traditional valuables are not freely interchangeable, we collected details of the prices paid for any items of di hambo which had been purchased by the sample,[2] and by using these in conjunction with the unitary scale of value on which informants could readily place all items, we assessed the possible cash equivalent of non-monetary valuables acquired by the 12 households from various sources. This is set out in Table 8.

Table 8

Cash value and acquisition of hambo and di
($)

	Inherited	Purchased	Bride price or other exchange	Made or bought	Total
Hambo	48.40	9.30	17.70	16.60	92.00
Di	17.60	4.50	6.50	15.40	44.00
Total	66.00	13.80	24.20	32.00	136.00

1 See Crocombe and Hogbin 1963:52.

2 These prices were very nearly the same as those recorded at Inonda (Crocombe and Hogbin 1963: Appendix B).

454 considerable interest was shown, more than $14,000 being subscribed by the Orokaiva in the first six months of operation. However, it appeared during 1964 that this company might experience the same pattern of high initial interest and subsequent disenchantment, accentuated by the failure to pay a dividend at the end of the first year of operation.

439 Cocoa is purchased by both DASF and the Popondetta Cocoa Fermentary Ltd, a company financed entirely by European capital. Plans were being made in 1964 for the ex-servicemen settlers, both indigenous and expatriate, to establish their own fermentary.

366 [438] Weekly markets at Popondetta and Saiho provide outlets for subsistence produce but turnover is small and it is doubtful whether they contribute significantly to many individual incomes.[1] The principal buyer at Saiho is the Public Health Department and at Popoddetta, the urban indigenous wage labour force, but in both markets the volume of transactions between subsistence-oriented villagers (primarily involving lime, smoked fish, areca nuts and fresh meat) is increasing.

435 The Administration and the Anglican mission buy fresh foods brought to their stations. Since purchase prices were fixed by 461 the Administration at 2c and the mission at 1c per lb,[2] and only [433] a limited quantity is required, there is little incentive for the villager to increase production.

[241] In spite of an increasing commitment to cash cropping, rates of planting and levels of production fluctuate with changing prices and difficulties in selling certain crops. The purchase price for coffee has ranged between 9c and 32c per lb over the period 1955-65 while that for latex has fallen from a peak of 55c per lb during the Korean War boom to 9c per lb in 1965. A Citrus Marketing Scheme elicited much local interest in 1956-57 when fruit was purchased at 5c per lb, but it collapsed with the unwillingness of retailers in Port Moresby to handle the produce.

241 (f) Conclusions

[464] In spite of long participation in cash cropping, Orokaiva involvement is not high. Everywhere commercial production remains subsidiary to subsistence, individual cash crop holdings are almost

[434] [437]

[1] Dakeyne 1965:109; Rimoldi 1966:8. Both show, however, that a few individuals earn worthwhile sums from marketing.

[2] Bartered at this rate in salt, tobacco, razor blades and kerosene.

241 universally small and there is no evidence to suggest that any
[464] village producers are employing labour to increase production.[1]

454 Monetary investment at the village level is low and there are
no motor vehicles owned by individuals or groups of subsistence
493 villagers,[2] although a number of villages now possess copra driers
and coffee pulping machines.
407

The foregoing data suggest three main factors, largely unique to the sub-district, which may explain this situation.

464 (i) Labour shortages. Since pacification there have been repeated references to a high proportion of the adult male labour force being absent from their villages. Humphries (1923:203) refers to the Kumusi district being a 'famous recruiting-ground for plantation labourers' at the time of the first world war. Patrol reports after the second world war make periodic references to shortages of manpower in the villages and suggest that the regulation maximum of 30 per cent absent was at times exceeded (e.g. Higaturu 1-1543/44). The establishment of plantations under the ex-servicemen's credit scheme attracted much local labour at a time when returns from wage
[461] labour were considerably higher than those from cash cropping. Many Orokaiva still prefer wage labour to commercial agriculture as a source of cash.

73] (ii) Consequences of the disasters. The effects of the war and
435 the volcanic eruption served to accentuate the instability of settlement and fragmentation of groups. Resettlement after the eruption took several years in some cases and is likely to have deterred interest in planting commercial trees, at least in the directly affected area, which was the most densely settled part of the Orokaiva region. The findings quoted earlier[3] suggest that the initial Orokaiva adaption to the volcanic disaster was more active

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[1] Since our survey, one Inonda man has taken a job as a driver in Popondetta and employs a labourer at $3 per week to maintain his food gardens. For a description of four Orokaiva entrepreneurs with large holdings of cash crops see Crocombe 1967.

[2] With the single exception of the indigenous ex-servicemen settlers, several of whom own vehicles; imported foodstuffs comprise a significant element of their diet and considerable use is made of outside labour, commonly kinsmen. Payment, however, is often nominal or in kind.

[3] See p.16. A

A,[See Category 73I, p.16--Analyst]

431 457 Other informal transactions involving specific reciprocal obligations include the exchange of labour services, gifts of animals killed during a hunting expedition and more or less casual transactions with non-residents.

574 Formal exchanges operate on a larger scale than the daily or casual transactions. Crocombe (1966:71-2) has listed the main Orokaiva traditional ceremonies ('pondo' or feasts) as marking initiation, marriages, deaths, enhancement of prestige, land transfers, the re-establishment of peace after a quarrel and the [178] lifting of prohibitions between a man and his mother-in-law. The first and last of these have become very rare. In addition to the traditional ceremonies, parties may now be held to mark Christmas, Easter, the saint's day of the local church, the opening of a school or aid post, and birthdays.

A feast provides an opportunity for settling many obligations which may be quite irrelevant to the ostensible purpose and may not [439] concern the person or group actually 'giving' the feast. It may [262] involve one or several villages or descent groups. The feast foods are almost exclusively village-produced, although small amounts of storebought goods, particularly rice, tinned fish, bread, tea and sugar, are becoming more common. Some feasts, such as those marking the end of minor disputes between individuals, are essentially exchanges and in themselves take little time; others include much ceremonial and may last longer than twenty-four hours.[1]

Parties seldom involve reciprocal exchanges though at some large ones traditional obligations to other participants may be settled. Invitations are usually given on the basis of residence near the [535] location of the party rather than of membership of a particular [533] descent group. Most take place during the afternoon and evening [534] and non-traditional dancing to guitar accompaniment may continue throughout the night. Generally, only the host's household is involved in much preparation for a private party but other men's wives will help prepare food, for which some return is expected. Often only a small number of those attending receive a share of food in the customary manner. Others may participate in the dancing at will, but, if they wish to eat or drink, must purchase food [77] or alcohol. Behaviour at such parties is largely imitative of European practice, to the extent that at one wedding party observed the bride was presented with a quantity of old plates, dishes and cutlery by other villagers.

438 In addition to these exchanges with kinsmen, co-residents and [137] neighbouring villagers, there have been long-established trade links between the inland and coastal people. This trade originally

[1] In the past they sometimes lasted several days.

511
439

Table 4:6

Rivers: non-traditional household property, November 1964
(Figures represent numbers of items)

Household no.	1	2	3	4	5	6	7	8	9	10	11	12
No. of adults	2	3	2	3	1	2	2	3	2	3	2	2
Tools and equipment:												
Axe	2	2	2	2	1	2	2	2	1	1	2	
Bush knife	3	4	3	4	2	2	2	3	3	2	3	
Grass knife	2	1	1	1	-	1	-	3	2	2	2	
Shovel/spade	2	-	-	1	-	-	-	2	1	-	1	
Hoe	-	-	1	-	-	-	-	-	-	-	-	
Fork	-	-	1	-	-	-	-	-	-	-	-	
Pocket knife	2	4	1	2	2	2	2	3	1	2	1	
Saw	-	-	1	-	-	1	-	-	-	-	1	
File	-	1	1	1	-	1	-	1	-	-	-	
Hammer	-	-	-	-	-	-	2	3	1	-	1	
Adze	-	1	-	-	-	-	-	-	-	-	-	
Axle	-	-	-	-	1	-	-	-	-	-	-	
Spanner	-	-	-	-	-	1 not	-	-	-	-	-	
Shotgun	-	1	-	-	-	-	-	-	-	-	1	
Sack	2	-	-	3	-	1	-	-	-	2	-	
Household:												
Cutlery	21	13	2	11	2	9	2	24	11	4	4	
Cooking pot	3	3	1	1	-	4	1	4	4	2	3	
Dish/plate	9	20	9	10	-	8	3	12	15	10	13	
Mug/glass	2	9	1	5	-	4	-	5	2	5	4	
Teapot	-	-	-	-	-	-	-	1	1	-	-	
Needle and thread	-	-	-	-	-	Yes	-	-	Yes	Yes	-	
Hurricane lamp	2	1	1	1	-	1	-	-	2	1	1	
Torch	-	-	-	2	-	-	-	-	-	1	-	
Radio	-	1	-	-	-	-	-	-	-	-	-	
Personal:												
Blanket	2	3	-	-	1	4	1	3	3	1	1	
Sheet	2	4	3	-	1	1	-	2	1	-	1	
Pillow	-	1	-	1	-	2	-	1	1	-	-	
Mosquito net	-	-	-	-	-	1	-	-	-	-	-	
Sleeping-mat	1	3	-	2	-	-	-	1	2	2	-	
Towel	3	7	1	1	1	3	-	1	1	1	-	
Groundsheet cape	-	-	-	1	-	-	-	1	-	-	-	
Suitcase/kitbag/pack	4	4	2	-	-	2	1	5	4	1	3	
Laplap	9	2	1	-	-	2	11	3	5	2	1	
Shirt/blouse/dress	5	4	3	4	2	2	1	7	6	2	2	
Trousers/shorts/skirt	9	11	3	3	1	7	-	13	5	5	4	
Underwear	-	2	-	-	-	-	-	1	2	1	1	
Sweater/coat	-	-	-	1	-	-	-	-	1	-	1	
Footwear	-	2	-	2	-	1	-	-	1	-	-	
Belt	-	1	-	-	-	1	-	1	1	1	2	
Handkerchief	-	-	-	-	-	-	-	-	-	2	-	
Hat	-	1	-	-	-	-	-	-	-	-	-	
Hair oil/powder	-	-	-	-	-	1	-	-	2	-	-	
Comb/brush	-	-	-	1	-	-	-	4	-	-	-	
Toothbrush	-	1*	-	-	-	-	-	-	-	-	-	
Mirror	2	2	-	2	-	1	1	2	3	2	1	
Scissors	-	1	-	-	-	-	-	-	-	-	-	
Biro/pencil	-	2	-	-	-	-	-	5	-	-	-	
Purse	-	2	-	-	-	1	-	-	1	-	-	
Lighter	-	-	-	-	-	-	-	1	-	-	-	
Watch	-	-	-	-	-	-	-	1	-	-	-	

* Acquired during the second world war!

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Notes. 1. There is also some communally-held rubber-tapping equipment (tapping tools, spouts and a bucket) in the village, provided by the owner of the local rubber factory.

2. Considerable use is made of discarded metal containers, e.g. large cans for cooking pots, screw-top tobacco tins for lime, and beaten-out drums for hearths.

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Table 4:13

Inventor non-traditional household property, November 1964

Household no.	14	17	18	19	20	21	22	23	24
No. of adults	4	2	1	1	2	2	2	2	2
Tools and equipment:									
Axe	1	2	1	1	1	2	1	3	2
Bush knife	3	2	1	2	3	4	3	4	2
Grass knife	2	2	2	1	1	1	3	2	2
Spade	4	1	-	1	1	1	-	-	1
Hoe	-	1	-	-	-	-	-	-	-
Pick	-	-	-	-	-	-	-	1	1
Rake	-	-	-	-	-	1	-	-	-
Saw	-	-	-	-	1	1	1	-	1
File	1	-	-	1	-	1	1	1	2
Hammer	2	1	-	1	1	1	2	1	2
Chisel	-	1	-	-	-	-	2	1	3
Measuring tape	-	-	-	-	1	-	-	2	-
Level	-	-	-	-	-	-	-	1	1
T-square	-	-	-	-	-	-	-	-	1
Ladder	1	-	-	-	-	-	-	1	-
Swimming glass	2	3	-	-	1	1	1	-	1
Fishing line	-	-	-	-	1	-	-	1	-
Shotgun	-	-	-	-	-	-	-	1	-
Household:									
Cutlery	13	5	8	2	6	15	7	15	15
Cooking pot/kettle	12	7	4	-	5	4	4	6	5
Dish/plate	21	20	8	-	11	8	6	17	16
Mug/glass	2	3	1	-	3	-	1	7	4
Teapot	-	-	-	-	-	-	-	1	1
Pressure lamp	-	-	-	-	-	1	-	-	1
Hurricane lamp	1	1	1	1	1	1	1	1	-
Torch	1	1	-	-	1	1	1	-	1
Bucket	-	-	1	-	-	1	-	-	-
Water-drum	1	1	-	-	-	1	-	2	-
Iron	-	-	-	-	-	-	-	1	-
Broom	-	-	-	-	-	4	-	-	-
Table	-	2	-	-	1	-	-	-	1
'Stool's	2	4	-	2	4	3	1	3	2
Tea-towel	-	-	-	-	-	-	-	2	-
Personal:									
Blanket	6	1	2	1	1	2	-	3	1
Sheet	-	2	-	-	1	-	-	1	1
Pillow	1	-	-	-	-	2	1	2	2
Mosquito net	3	2	1	2	1	1	1	3	2
Towel	-	4	-	-	-	1	-	1	1
Suitcase/box/pack	3	2	1	-	1	2	1	4	1
Laplap	-	1	-	-	-	-	1	-	2
Shirt/dress/blouse	13	4	1	3	3	13	-	11	4
Shorts/skirt	13	1	3	1	4	10	1	10	7
Underwear	-	-	-	-	-	-	-	10	-
Pullover	-	1	-	-	-	-	-	-	-
Footwear	-	-	-	-	-	2	1	3	-
Handkerchief	1	-	-	-	-	-	-	1	-
Tie	-	-	-	-	-	-	-	2	-
Comb/hairbrush	2	1	-	-	-	-	-	-	-
Scrubbing brush	-	1	-	-	-	-	-	-	-
Mirror	2	1	-	1	-	1	-	1	1
Scissors	-	2	-	-	-	2	-	1	-
Umbrella	-	-	-	-	-	1	-	-	-
Pencil	3	-	-	-	-	-	-	-	-
Watch	-	-	-	-	2	-	-	-	-

* These are old mortar-bomb cases which, inverted, serve as stools.

8: Waddell & Krinks E-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

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Table 10:1

Sivuai: major items of non-monetary exchange over the whole survey period

	Acquisition			Disposal		
	Total	%	Amount received from researchers*	Total	%	Amount disposed to researchers*
A. Subsistence produce	(lbs)		(lbs)	(lbs)		(lbs)
Taro	3,390	29	1	4,151	29	388
Sweet potato	1,136	9	-	1,942	13	543
Yam	870	8	-	1,423	10	193
Xanthosoma 'Soup'	350	3	-	104	1	8
	169	1	4	228	2	43
Sugar-cane	155	1	-	161	1	30
Corn	100	1	-	211	1	90
Banana	1,096	9	-	827	6	111
Coconut	274	2	2	281	2	66
Pandanus fruit	156	1	-	140	1	5
Sago	556	5	-	744	5	19
Areca/pepper/lime	107	1	1	100	1	4
Breadfruit	968	8	-	1,497	10	80
Other cultivated produce	306	3	-	586	4	341
Pig (domestic and wild)	1,345	11	-	1,372	9	8
Cuscus	138	1	-	181	1	-
Other product of hunting or foraging	138	1	-	180	1	7
Other (firewood, etc.)	297	3	-	330	2	-
Total	11,451	97	15	14,458	99	1,956
B. Labour services	(hours)			(hours)		
Cash sector	128	12		143	13	
Subsistence sector	1,030	88		955	87	
Total	1,158	100		1,098	100	
C. Storebought goods	($)			($)		
Rice	15.08	8	1.30	5.42	22	0.12
Tinned fish	12.63	7	0.85	5.10	21	0.10
Tinned meat	2.95	2	-	0.06	-	0.02
Bread	1.19	1	-	0.10	-	-
Other foodstuffs	3.64	2	0.02	0.74	3	0.02
Alcoholic drinks	1.39	1	-	-	-	-
Trade tobacco	31.66	17	14.67	5.02	20	0.10
Cigarettes	1.49	1	-	0.06	-	-
Clothing	46.20	25	-	2.74	11	-
Radio/watch	30.00	16	-	-	-	-
Other personal goods	9.36	5	0.35	0.54	2	-
Household goods	6.12	3	3.38	2.34	8	-
Cartridges	9.40	5	0.60	2.00	8	-
Batteries, torches, bulbs	2.68	1	2.40	-	-	-
Other tools and equipment	4.99	3	-	0.75	3	-
Total	181.82	97	23.57	24.87	98	0.36

* Included in total.

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Table 10:2

Sivepe: major items of monetary exchange over the whole survey period

	Acquisition			Disposal		
	Total	$	% (value)	Total	$	% (value)
A. Subsistence produce	(lbs)			(lbs)		
Sweet potato	-	-	-	390	6.50	26
Taro	-	-	-	108	1.80	7
Yam	-	-	-	35	2.25	8
Areca/pepper/lime	17	3.70	32	15	3.00	12
Tobacco	-	-	-	2	0.70	3
Pig (domestic or wild)	66	5.65	49	70	8.15	33
Wild game (cuscus etc.)	14	1.50	13	13	2.30	8
Fish (smoked)	5	0.50	4	-	-	-
Eggs	0.3	0.20	2	-	-	-
Total	102.3	11.55	100	633	24.70	97
B. Labour services	(hours)			(hours)		
Cash sector	12	1.50	100	10	0.60	100
C. Cash crops				(lbs)		
Coffee (parchment)	-	-	-	324	58.30	81
Rubber (coagulum)	-	-	-	290	13.30	19
Total				614	71.60	100
D. Storebought goods						
Rice		17.22	13		-	-
Fish (tinned)		16.59	13		-	-
Meat (tinned)		8.25	6		-	-
Biscuits (sweet)		6.02	5		-	-
Bread		5.35	4		-	-
Sugar		3.30	3		-	-
Other foodstuffs		4.12	3		-	-
Alcoholic drinks		4.45	3		-	-
Tobacco - trade		4.54	3		-	-
Cigarettes		2.25	2		-	-
Clothing		10.10	8		0.40	100
Toiletries		3.14	2		-	-
Bedding		2.50	2		-	-
Other personal goods		3.60	3		-	-
Cooking utensils		8.20	6		-	-
Other household goods		6.18	5		-	-
Torches, batteries, bulbs		10.98	8		-	-
Cartridges		10.40	8		-	-
Other tools and equipment		3.70	3		-	-
Total		130.89	100		0.40	100

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439 (iv) Storebought goods. Storebought goods account for 81 per cent of monetary acquisitions. Most originate from the external sector (trade stores) although alcoholic drinks together with a small quantity of food comprise purchases from other subsistence villagers at 'parties'. Only one instance of a disposal was recorded - a woman making a skirt at a mothers' union sewing class and selling it to another for the price of the materials.

Forty-six per cent of all purchases comprises foodstuffs and a further 9 per cent stimulants. Some of these can be considered luxuries in that they are largely superfluous to requirements. However, many dry season purchases, of rice in particular, are made specifically to supplement supplies from the subsistence sector.

The remaining 45 per cent of purchases consists of household and personal goods and equipment. Most of these are more basic to the economy: either their greater efficiency or durability has led to the elimination of traditional counterparts (as in the case of cooking utensils, axes and clothing), or they represent important technical innovations (as in the use of torches and guns for hunting).

(c) Cash

434 According to cash transactions effected during the survey, incomes amount to 40c per man-week or $21.02 per man-year, but 8.4 per cent of this amount originated from the researchers. If money from this source and bank transfers are excluded, a credit balance of $20.76 or a total income of $247.98 is recorded (see Table 10:3). Thus in a 'normal' year an adult's income would amount to $18.19 with a credit balance at the end of 74c, that is, he might save 4.1 per cent of his earnings. On account of the researcher's presence 16.9 per cent of earnings was saved in 1964. The majority enters, almost immediately, into circulation through either the gift exchange or the monetary system.

Table 10:3

Sivepe: acquisition and disposal of cash over the whole survey period
($)

	Acquisition	Disposal
Total	273.68	239.22
Including:		
Savings bank transfers	-	12.00
Transactions with researchers	25.70	-

432 derived from the data is in part misleading since sales of coffee were made periodically from June through to September while rubber can be, and is, sold at any time of the year. A feature of both crops is, however, that substantial quantities are harvested, processed and stored prior to entry into the exchange system. Unlike most subsistence crops both are capable of storage while, in the case of coffee, the infrequent opportunities for sale make this a necessity. Over the survey three sales of rubber and five of coffee were recorded.

511 (iv) Storebought goods (Table 10:7 and Fig.10:3). The distinct periodicity apparent in the movement of the major storebought goods is connected with both seasonal factors and the receipt of parcels from kinsmen in wage employment. The consumption of these goods can be variously judged, according to the time of year, as supplementing the subsistence diet or as being surplus to requirements. During period I, with little feasting and an abundance of garden produce (plus a shortage of available cash), only a small quantity of food is purchased and none circulated. The acquisition of rice is at a peak during period II to compensate for the shortage of starches in the subsistence sector; yet even at this time consumption amounts to only about 1 lb of white rice per adult per week. Most is purchased in 1 lb or 2 lb lots from local trade stores, although on one occasion (in week 16) a 56 lb bag was purchased. [262] Most conspicuous consumption and exchange takes place during [439] period III: tinned meat and fish which are frequently consumed with the staple foods exceed rice in the value of exchanges, but acquisitions of them only amount to about 0.5 lb per adult per week.

The climax in the circulation of tobacco and clothing during period II reflects the receipt of two gift parcels by sample members, with goods to an estimated value of $65. In the case of cartridges the increased circulation during the dry season was associated with improved hunting opportunities and, in connection with them, the quasi-entrepreneurial activities of one sample member.[1]

The manner in which storebought goods are circulated is similar to that of subsistence produce in that there is little storage or stock held. Because the utilisation of these goods is related primarily to specific circumstances, such as the availability of cash, receipt of gift parcels and feast requirements, the pattern of exchange over time assumes a highly irregular form which, to a considerable extent, obscures seasonal variations. It should be noted, however, that this form closely parallels that of the circulation of subsistence produce (see Fig.10:2).

A,[See Category 438, p. 193--Analysis]

[1] See p.119.

8: Waddell & Krinks E-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

454 worthwhile way in which they can invest their money or, three, a general inability of the people to handle their money effectively. An analysis of the pattern of expenditure on commodities (which account for 55 per cent of total expenditure) throws some light on the problem since, in this area, the people themselves initiate the act rather than any other institution.

511 Food and stimulants account for 62 per cent of the expenditure on commodities (see Table 10:12). In a predominately subsistence economy such purchases are generally considered to be of a luxury nature and superfluous to basic requirements. This view cannot be substantiated on the basis of the Sivepe evidence. Sixty-three per cent of rice purchases, the single most important item, are made during July, August and September - the latter part of the dry 140 season - when there is a serious shortage of cultivated foods. The 439 consumption of tinned meat and fish compensate, to some extent, for the inadequate protein content in the subsistence diet. Similarly, purchases of subsistence produce are restricted to the locally scarce resources of fish and meat, together with lime which is eaten with areca. Other foodstuffs include biscuits, bread, sugar and salt and only certain of these can be treated as purely luxury purchases. The other important commodities purchased are clothing and household goods (principally cooking utensils). Both are now essential elements in the material culture, having displaced their traditional counterparts.

438 In comparing the purchasing patterns of cash and non-cash croppers 439 (and therefore of high and low income households) a clearer pattern 511 of priorities emerges. Among the latter clothing is the most important commodity purchased, followed by rice, meat and fish, and household goods. Together these account for 72 per cent of all purchases. The range of purchases of cash croppers is more widely distributed, the above commodities accounting for only 50 per cent of the total. Thirteen per cent of their expenditure is on goods used in hunting - cartridges, torches, batteries and bulbs - and it is in this activity particularly that their larger incomes are of direct significance in effecting a technological advance and increasing productivity. Their more substantial purchases of rice can be viewed in a similar light - reducing their need to make sago, so enabling them to continue their cash cropping activities through the dry season.

In general purchasing patterns can be readily understood in terms of the requirements of the village economy. Expenditure is largely restricted to goods which have displaced their traditional counterparts or which compensate for seasonal food shortages and there is little evidence of extravagance.

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Table 10:13

Sirupi: household expenditure on commodities over 46.5 weeks

Household		Subsist-ence produce	Rice	Meat/fish (tinned)	Other food-stuffs	Stimulants	Cloth-ing	Other personal goods	House-hold goods	Torches batteries, bulbs	Cartridges	Other tools and equipment	Total
1*	$	2.34	3.80	6.73	8.67	4.26	4.44	4.16	6.72	3.20	0.80	1.64	44.96
	%	5	8	15	20	9	10	9	15	7	2	4	99
2*	$	6.68	14.40	5.17	5.40	0.10	3.00	1.40	0.38	0.20	2.10	0.70	39.35
	%	17	37	13	14	-	8	4	1	1	5	2	102
3*	$	1.00	4.00	3.40	1.76	0.64	3.85	0.44	1.64	1.70	0.40	0.50	19.33
	%	5	21	18	9	3	20	2	8	9	2	3	100
4**	$	-	-	-	-	-	-	-	-	-	-	-	-
	%	-	-	-	-	-	-	-	-	-	-	-	-
5*	$	2.30	3.80	4.54	5.03	0.70	1.34	0.20	1.58	4.46	2.85	1.44	27.34
	%	8	14	17	18	3	5	1	6	16	7	5	100
6	$	0.20	0.40	0.20	-	-	-	0.20	-	-	0.10	1.00	2.10
	%	10	19	10	-	-	-	10	-	-	5	48	102
7***	$	0.20	-	0.20	-	-	-	-	-	-	-	-	0.40
	%	50	-	50	-	-	-	-	-	-	-	-	100
8	$	1.40	0.20	0.60	-	0.84	3.60	-	0.14	0.10	-	-	6.88
	%	20	3	9	-	12	52	-	2	1	-	-	99
9*	$	0.70	6.46	7.18	5.99	6.85	3.25	1.15	3.26	0.50	0.50	0.25	36.09
	%	2	17	19	16	18	9	3	14	1	1	1	101
10	$	-	1.00	1.40	0.20	-	-	-	3.20	-	-	-	5.80
	%	-	17	24	3	-	-	-	55	-	-	-	99
11	$	-	2.14	1.94	2.03	0.78	3.70	0.50	0.24	-	0.90	-	12.23
	%	-	17	16	17	6	30	4	2	-	7	-	99
12†	$	0.40	0.40	0.48	0.40	-	0.70	0.40	-	-	-	-	2.78
	%	14	14	17	14	-	25	14	-	-	-	-	98
13*	$	1.00	6.30	2.94	2.80	0.40	2.40	0.30	-	1.00	1.30	-	18.64
	%	5	35	16	15	2	13	2	-	5	7	-	100
14	$	0.40	1.50	4.28	2.30	0.40	1.70	0.50	4.85	0.40	-	-	15.53
	%	3	10	28	15	3	11	3	26	3	-	-	102
15*	$	1.10	1.90	2.10	2.14	1.54	1.50	3.10	1.24	2.50	7.10	-	24.22
	%	5	8	9	9	6	6	13	5	10	29	-	100
Total	$	17.54	44.50	41.16	36.92	16.51	29.48	12.35	22.35	14.06	15.25	5.53	257.45
	%	7	18	16	15	6	11	5	9	5	6	2	100
Percentage:													(£312.93)
Cash croppers		7	19	15	15	7	9	5	7	6	7	2	99
Non-cash croppers		6	13	20	11	4	22	4	17	1	2	2	102 (£44.72)

* Cash cropping households. ** Surveyed for 6.5 weeks only. *** Surveyed for 27.5 weeks only. † Surveyed for 11.5 weeks only.

8: Waddell & Krinks E-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

Table 10:15

Rivers: the circulation of goods and services by occupational category of partner
(percentages)

	Acquisition						Disposal					
	Total	1	2	3	4	5	Total	1	2	3	4	5
	(lbs)						(lbs)					
Subsistence produce	11,353	96	1	2	-	1	15,091	73	-	4	2	21
deviant items:												
Xanthosoma	350	94	-	6	-	-	104	92	-	1	-	7
Sweet potato	1,136	95	4	-	-	1	2,332	55	-	-	-	45
	(hrs)						(hrs)					
Labour services	1,170	99	1	-	-	-	1,108	99	-	1	-	-
	($)						($)					
Cash crops	-	-	-	-	-	-	71.60	-	-	-	-	100
Storebought goods	314.16	19	1	8	26	46	25.43	99	-	-	-	1
deviant items:												
Rice	32.30	16	1	6	1	76	5.42	97	-	-	-	3
Tinned fish	29.22	29	1	6	-	64	5.10	98	-	-	-	2
Tinned meat	11.20	-	4	15	3	78	0.06	67	-	-	-	33
Clothing	56.30	-	-	6	74	19	3.14	100	-	-	-	-
Bedding	9.20	-	16	-	57	27	-	-	-	-	-	-
Cartridges	19.80	39	-	1	-	61	2.00	100	-	-	-	-
Socks	3.50	14	-	86	-	-	1.50	100	-	-	-	-
Watch/radio	30.00	-	-	33	67	-	-	-	-	-	-	-
Cash	273.72	13	-	7	34	46	279.20	20	-	-	-	80

1 = subsistence villagers; 2 = settlers; 3 = wage earners within District; 4 = wage earners outside District; 5 = organisations.

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437 absences from the village[1] and the services are normally reciprocated with goods originating in the external sector.

The exchange of cash crops (for cash) is wholly bilateral in form - between producer and buyer - with no other movement identifiable. This does not apply to storebought goods. While 46 per cent are obtained directly from trade stores and other organisations, significant quantities are also received from wage earners, as well [438] as from other subsistence villagers. The bulk of goods obtained from organisations are foodstuffs and stimulants (59 per cent) and these may be consumed casually or redistributed, primarily in [439] ceremonial exchanges. Wage earners outside the District are the second most important source of storebought goods; in this case the goods are largely non-perishable and of a comparatively high value 431 as, for example, a radio, clothing, bedding and linen. Three parcels of gifts received were valued at $44, $35 and $19 each. Not only are such items suited for postal delivery but these are the only people that can really afford to make such gifts. Wage earners within the District are unable to make large gifts, both because of their lower incomes and the frequency of inter-visiting. Instead small quantities of food or used clothing are commonly given by them, although on one occasion a villager received a second-hand watch and on another, a number of sacks. The latter are highly valued for the storage of coffee.

438 The 19 per cent of storebought goods obtained from villagers 439 fall into two categories - food which, as stated above, is mostly ceremonially exchanged,[2] and cartridges. Both the owners (or the operators) of shotguns received frequent requests to hunt on behalf of others, in return for the supply of cartridges. However, one of them also expected an additional payment of 10c per cartridge from some people for the service.[3]

437 With the exception of a few small gifts of prepared food made to the researchers, the acquired storebought goods are only given to other subsistence villagers. Essentially, therefore, the pattern of movement of these, as of subsistence produce, reflects the different resource bases of the various socio-economic categories where the diffusion of kin facilitates reciprocally based exchange or, in the absence of kin, monetary exchange. The opportunities for this latter type are enhanced by the introduction of non-kinsmen into the subsistence villagers' orbit, particularly as mission

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[1] See p.77.

[2] In one minor feast an individual received thirteen tins of fish and large pots of rice and tea, apart from the customary range of subsistence produce.

[3] See p.119.

employees. The need for these people to evolve some sort of exchange relationships with neighbouring villagers is explained by their low salaries and restricted subsistence resources. Their presence also facilitates long distance hawking, in that people from the coast will come to stay with relatives employed inland, bringing with them their fish and lime.

The main use of cash is as the medium of exchange with the external sector and most transactions are, therefore, with organisations, with 80 per cent of disposals to them. These cover not only purchases of goods but tax payments and mission contributions, which together account for 15 per cent of all disposals to organisations. Only a part of this expenditure is met by the sale of cash crops and subsistence produce and by village-based wage labour. If gifts from the researchers are disregarded, remittances from wage earners outside the District rank with earnings produced directly by the sample's endeavours (37 and 40 per cent respectively of total acquisitions), while a further 8 per cent of total income is derived from wage earners within the District. In effect the external sector of the village economy is dependent to a very substantial extent on the earnings of those kinsmen in wage labour.

The geographical dimensions of exchange

As revealed in the preceding section, the entry of a number of kinsmen into the external sector of the economy and their scattering over a wide area considerably complicate the spatial dimensions of exchange by introducing something of a random element based upon the distribution of expatriate settlements and institutions rather than of indigenous population. Thus, three-quarters of all clothing originates from Port Moresby since that is where the highest income earners (among kin) are employed; the 34 per cent of cash income obtained from wage earners outside the District came from three separate points in the Central, Gulf and Western Highlands Districts where relatives are stationed; while the bulk of foodstuffs are purchased in a store at Awala - one hour's walk from the village - rather than another at Kongehambo - only 20 minutes away - because the former is better stocked.

With novel means of communication available, particularly the postal service, the circulation of non-perishable goods which are not a product of the village economy is largely independent of factors of distance. Further, such circulation operates primarily outside the network of subsistence villagers, is restricted principally to the monetary system and is of a more strictly 'economic' nature. By contrast the exchange of subsistence produce and labour services takes place predominately at the village level, and here a more significant geographical (and sociological) dimension to exchanges can be identified.

8: Waddell & Krinks E-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

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Table 11:1

Inamb: major items of non-monetary exchange over the whole survey period

	Acquisition			Disposal		
	Total (lbs)	%	Amount* received from researchers (lbs)	Total (lbs)	%	Amount* given to researchers (lbs)
A. Subsistence produce						
Taro	5,494	39	15	6,307	46	271
Xanthosoma	353	3	-	141	1	2
Sweet potato	1,419	10	2	1,235	9	69
Yam	406	3	2	457	3	13
Pitpit	160	1	-	221	2	4
Banana	1,098	8	6	528	4	18
Pumpkin	521	4	-	410	3	18
'Soup'	261	2	-	266	2	9
Sago	263	2	4	135	1	1
Coconut	324	2	5	416	3	25
Sugar-cane	546	4	19	662	5	73
Other cultivated produce	833	6	4	631	5	31
Fish	165	1	-	172	1	9
Wallaby	313	2	-	241	2	2
Wild pig	1,461	11	-	1,836	13	2
Other produce of hunting, fishing and foraging	156	1	-	151	1	3
Other	160	1	-	48	-	-
Total	13,933	100	57	13,857	101	550
B. Services	Hours	%		Hours	%	
Labour, cash sector	52.8	8		53.1	12	
Labour, subsistence sector	578.4	92		386.8	88	
Total	631.2	100		439.9	100	
C. Store-bought goods	$	%	$	$	%	
Rice	35.34	20	8.86	12.94	31	
Tinned fish	13.12	8	0.40	6.16	15	
Tinned meat	11.02	6	1.58	1.30	3	
Bread	4.46	3	0.36	3.08	8	
Tea	1.84	1	0.26	1.04	3	
Sugar	4.90	3	0.30	1.62	4	
Flour	1.20	1	-	0.90	2	
Soft drinks	1.34	1	0.38	0.90	2	
Sweet biscuits	4.12	2	0.20	1.94	5	
Prepared refreshments	2.36	1	1.60	0.54	1	
Alcoholic drinks	8.38	5	2.44	-	-	
Trade tobacco	19.66	11	14.90	2.26	6	
Cigarettes	1.96	1	0.14	0.14	-	
Other foodstuffs	2.44	1	1.06	0.36	1	
Clothing	39.60	23	25.20**	6.70	16	
Other personal goods	9.42	5	8.18	0.24	1	
Household goods	8.62	5	5.94	0.04	-	
Tools and equipment	4.90	3	1.04	0.70	2	
Total	174.18	100	65.04	40.96	100	

* Included in total.
** Includes parcel of clothing valued at $21.54 from research worker in Australia.

438 proportion formed by pitpit is due to the fact that it was only in season during the first twelve weeks of the survey (see Table 11:4). Yams, Xanthosoma and sago are similarly seasonal and in certain weeks are more prominent than shown here. Of the other cultivated products, areca nuts are important although they amount to only 93 lbs acquired and 39 lbs disposed over the survey. One lb consists of approximately 24 areca nuts, so that about 86 nuts were acquired and 36 nuts disposed of by the village as a whole each week. In other words, there is a regular traffic in areca. Inonda people are dependent on outsiders for the nut because the palm does not grow well on their land.

It is noteworthy that the total acquisitions and disposals of subsistence items are very close to balancing - the excess of the former amounts to only 76 lbs out of a total of 14,000 lbs. However, the reservation should be made that the balance is achieved by equating all items on the basis of weight, and this does not exactly reflect Orokaiva methods of calculation. It is, nevertheless, probable that the outflow of the most favoured foods - taro (800 lbs) and pigmeat (375 lbs) - helps to balance the inflow of services and storebought goods and that this is an expression of the Orokaiva ideal of reciprocity in relationships.

437 (ii) Labour services. The exchange of labour services is to
[431] some extent a matter of individual inclination. Where an obligation exists, it has not necessarily been incurred through an equivalent service, nor is reciprocation in this way essential - it may, instead, be through a gift of garden produce and obligations and reciprocations may be separated by a time-lag of a year. For this reason and others discussed below, the pattern of services over a period varies from individual to individual and acquisitions and disposals are not often in balance. In Table 11:1 the excess of acquisitions over disposals of labour services in the subsistence sector reflects large amounts of labour given by people from other villages, mostly young men staying for a few days or weeks with kin in Inonda. They contributed 42 per cent of subsistence services, in such tasks as house-building, sago-making and gardening. If it is assumed that people who are temporarily absent from Inonda follow the same work patterns as people temporarily resident, this apparent excess would be considerably reduced.

439 (iii) Storebought goods. Table 11:1 also shows the values of
431 goods derived from trade stores that are circulated through the
[123] gift exchange system. Thirty-seven per cent of the total value of acquisitions shown was in gifts from research workers. One-third of this was in the form of a parcel of clothing from a research worker in Australia and the rest was contributed during the survey. The most significant contributions were of trade tobacco, mosquito nets (shown as 'personal goods'), clothing and a suitcase given to the leading man for his journey to Port Moresby.

Discounting the effects of the researchers' presence, there is a considerable excess of acquisitions over disposals. This largely reflects the continued participation in the gift exchange system of villagers' kin who are in close contact with the monetary sector as wage earners or settlers (see Table 11:9).[A] The contributions of such people are particularly marked in the case of rice and clothing, which are, in terms of value, the most important items of storebought produce entering the gift exchange system. As well as rice, tinned fish, bread, trade tobacco and several lesser food items all enter into the exchange system occasionally. They are invariably given in small quantities, sometimes in the daily food transfers and sometimes as contributions to a feast or party.

(b) Monetary sector

Table 11:2 shows the total values of items acquired and disposed in exchanges involving an immediate return of cash. Purchases of subsistence produce are insignificant compared with the amounts acquired through gift exchange and they are usually made to fulfil an urgent need, such as feast contributions. Areca nuts, however, are bought occasionally. They are mostly obtained in the Popondetta market, whereas fish and game are purchased from hawkers. Some garden produce was sold to road construction workers early in the survey, but the main sales of subsistence produce were made in Popondetta market during periods II and III and comprised mostly fish and smoked meat from hunted animals. The Inonda people acquire almost four times as much cash from sales as they spend on purchases of subsistence produce.

In total, subsistence produce accounts for only a small proportion of monetary exchanges, which are concerned mainly with storebought goods. The total value of purchases of such goods is almost $200. As with gift exchange, clothing and rice are the most important items, with certain other foodstuffs - tinned fish, bread, sugar, biscuits and flour - also accounting for significant proportions. Apart from food and clothing, the main items purchased comprise household goods and tools and equipment for work.

Apart from goods sold through the medium of the trade store,[1] copra was the only non-traditional commodity sold during the 26 weeks of the recording periods. Some coffee was, however, sold in the weeks intervening between the three periods.[2]

The excess of acquisitions over disposals of storebought foods is evidence of the comparatively slight degree to which they enter into the gift exchange system, with the exception of rice and tinned

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[1] For details of the operation of the trade store, see p.255. B

[2] See p.257.

A.[See Category 892, p.247--Analyst] B.[See Category 444, p.235--Analyst]

meat and fish. Between 4 and 6 lbs of rice are given out each week on average, mostly as plates of cooked rice.

Table 11:2

Inonda: major items of monetary exchange over the whole survey period

	Acquisition			Disposal		
	lbs	$	%	lbs	$	%
A. Subsistence produce						
Xanthosoma	50.0	0.70	9	-	-	-
Banana	-	-	-	25.0	2.10	7
Coconut	2.0	0.10	1	15.0	0.75	2
Areca	9.8	2.06	27	1.0	0.20	1
Tobacco	-	-	-	0.5	0.20	1
Fish	8.5	2.10	27	39.0	6.80	23
Crocodile	-	-	-	12.0	4.50	15
Bird	-	-	-	12.0	2.10	7
Bandicoot	1.0	0.10	1	3.5	0.90	3
Wallaby	5.0	0.30	4	35.0	3.50	12
Pig	21.0	2.40	31	87.5	8.30	28
Eggs	-	-	-	0.3	0.30	1
Total	97.3	7.76	100	230.8	29.65	100

B. Storebought goods	$	%	$	%
Rice	21.40	11		
Tinned fish	16.86	8		
Tinned meat	5.98	3		
Bread	13.04	7		
Sugar	12.94	7		
Flour	12.60	6		
Soft drinks	4.72	2		
Sweet biscuits	11.44	6		
Hard biscuits	2.20	1		
Prepared refreshments	8.10	4		
Other foodstuffs and medicines	5.72	3		
Cigarettes, tobacco, alcoholic drinks	4.00	2		
Clothing	37.44	19		
Other	12.16	6		
Household goods	13.40	7		
Tools and equipment	16.70	8		
Copra			2.32	100
Total	198.70	100	2.32	100

Table 11:5

Inonda: mean weekly transactions of storebought goods during each recording period
($)

Item		Period I	Period II	Period III
Rice	Acquisition	2.56	2.39	1.89
	Disposal	0.62	0.39	0.61
Tinned fish/meat	A	2.00	1.48	2.09
	D	0.39	0.14	0.40
Bread	A	0.67	0.79	0.71
	D	0.16	0.12	0.08
Sugar	A	0.79	0.92	0.53
	D	0.17	-	0.04
Sweet biscuits	A	0.74	0.41	0.50
	D	0.17	-	0.05
Prepared 'snacks'	A	0.33	0.70	0.38
	D	-	0.03	0.03
Flour	A	0.04	2.24	-
	D	-	0.15	-
All storebought goods (incl. those not shown)	A	15.40	14.70	16.35
	D	1.67	1.82	2.99

acquisitions and disposals of subsistence products, whereas sweet potato accounts for 18 per cent and yam 10 per cent of acquisitions, and the same crops account for 12 per cent and 15 per cent respectively of disposals. Of the crops that may be stored, yams are clearly a dry season crop in terms of exchange as well as of harvesting (see Table 7:3), but Xanthosoma and sago are significant later in the year also. The level of transactions of bananas also increases in the dry season.

Although taro is still harvested during the dry season, there is a clear need to supplement it with other foodstuffs. This need is met in several ways: firstly, by production of sago, yams and manioc and by collection of green leaves and shoots. (These last substitute for pitpit, which is harvested only in the early part of the year.) Secondly, Table 11:4 suggests that Inonda receives net 'imports' of crops such as taro and sweet potato at this time from other villages. Thirdly, flour and rice are purchased, in addition to considerable quantities received as gifts from outside the village, and the net acquisitions by the villagers amount to an average of 20 lbs of each commodity per week. All the households purchased either rice or flour and all acquired some through gifts. The fall in acquisitions of taro per week from period I to period II is 70 lbs,

8: Waddell & Krinks E-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

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Table 11:17

Inonda: exchange of goods and services, by sex
(percentage distribution)

Category	Acquisition			Disposal		
	Men	Women	Total	Men	Women	Total
Subsistence produce:			(lbs)			(lbs)
Taro	40	60	5,494	6	94	6,307
Sweet potato	31	69	1,419	17	83	1,235
Yam	36	64	406	19	81	457
Banana	42	58	1,098	34	66	553
Pumpkin	21	79	521	16	84	410
'Soup'	70	30	261	3	97	266
Coconut	48	52	326	56	44	431
Sugar-cane	49	51	546	33	67	662
Areca	42	58	93	36	64	39
Other garden produce	44	56	1,566	26	74	1,089
Fish	49	51	174	71	29	211
Wallaby	81	19	318	85	15	276
Pig	77	23	1,482	85	15	1,923
Other produce of hunting, fishing and foraging	55	45	157	46	54	179
Other weight items	-	100	160	48	52	48
Labour services:			(hrs)			(hrs)
Cash	98	2	52.8	67	33	53.1
Subsistence	88	12	578.4	78	22	386.8
Storebought goods:			($)			($)
Rice	58	42	56.74	33	67	12.94
Tinned fish	67	33	29.98	54	46	6.16
Tinned meat	66	34	17.00	54	46	1.30
Bread	82	18	17.50	89	11	3.08
Sugar	75	25	17.84	100	-	1.62
Salt	48	52	1.24	-	100	0.12
Trade tobacco	71	29	21.24	45	55	2.26
Other foodstuffs and cigarettes	82	18	69.34	67	33	5.80
Clothing	60	40	77.04	55	45	6.70
Cooking utensils	21	79	9.76	-	-	-
Other storebought goods	88	12	42.60	14	86	0.78
Cash	88	12	337.36	90	10	340.70

	Men	Women	Total
Number of days surveyed	1,443	1,339	2,782
Percentage of total	52	48	100

438 462 greater sharing of refreshments by men when working or travelling together. Men are most prominent, however, in transactions of the produce of hunting and fishing, particularly wallaby, pig and fish. They engage in these activities more than women and a hunter will often give a whole pig or wallaby to a male relative, very rarely to a woman. The only instances recorded of gifts of carcasses to women were two young pigs caught in traps and a wallaby found dead (perhaps killed by a dog) on the roadway. As a rule, women are concerned in the distribution of meat only after an animal has been butchered. Women receive half the fish distributed, since young men returning from fishing expeditions almost invariably give part of the catch to close female relatives.

562 [439] [556] As men both earn and dispose of most of the money, it is to be expected that they acquire most of the storebought items - cooking utensils are the only significant exception, due to a single large purchase by one woman. Women are free to keep and dispose as they wish of cash acquired from gifts or in marketing (although they acquire less than men in this way) and husbands also give their wives sums of money as presents or for specific purchases. Women account for a slightly larger share of disposals of some storebought goods, especially rice, reflecting the fact that in Inonda rice is becoming an accepted subsidiary food and may be included in the routine daily exchanges of cooked food. This is true of flour also in the dry season. Rice is commonly prepared for visitors from other villages, perhaps to stress the wealth and 'modernity' of the Inonda people. As regards cash itself, most is handled by men.

437 462 562 Services are usually said to be given to household heads, so it is natural that most labour services are acquired by men. Those acquired expressly by women are largely in the form of garden and household tasks and house construction. Almost all the labour services relating to the cash sector are in cultivation of cash crops and, since women do not own commercial trees, are received by men, although the former do assist in their establishment and maintenance. In the subsistence sector, men own and control the exploitation of sago-palms and as sago-making accounts for 46 per cent of all assistance received in subsistence tasks, men are again dominant. They also provide most of the assistance in sago-making, and therefore account for the larger part of disposals of subsistence services.

The relationships between exchange and the socio-economic category of transacting partners

438 For each transaction, the name of the donor or recipient was recorded, together with his place of residence and occupational category - that is, whether he was a villager, a regular wage earner within the District, an ex-serviceman settler, or a wage earner resident outside the District. The categories are mutually

438 exclusive. Representatives of the external agencies were, for this purpose, grouped in a single category as 'organisations' (for example, the local government council, the army, the markets and trade stores). The term 'subsistence villager' includes those growing cash crops.

Table 11:18 shows how transactions of each category of goods and services are distributed among partners according to their occupational category. Items which deviate significantly (in most cases between 10 and 15 per cent) from the mean for their respective categories are shown separately.

As might be expected, the dominant position of villagers in exchanges of subsistence items is clear. For several items they account for 100 per cent of the total, although in the case of Xanthosoma only 34 per cent was acquired from this source. One household received several large gifts of the tuber from a New Guinea plantation labourer it had befriended, while some was also purchased at Popondetta market. Other noteworthy deviations include fish and game where significant quantities were sold at the market or given to settlers. In fact 34 per cent of the subsistence produce disposed to settlers comprised pigmeat, due, specifically, to a villager hunting on behalf of a relative on two occasions.

439 In contrast to the subsistence items, only a minority of non-traditional acquisitions is from villagers. Disposals of such items are smaller than acquisitions and only in a few cases - rice, tinned fish and clothing - is the total value above $6. Most disposals, particularly of food, are to other villagers. Most (over two-thirds) of the non-traditional items are acquired from trade stores (organisations). However, other people make significant contributions of some items: wage earners provide over half the alcoholic drinks, half the salt and considerable proportions of the rice, tinned fish and meat, and cigarettes, while the settlers are also a minor source of foodstuffs. The villagers clearly derive considerable benefit from the continued operation of the gift exchange system with these people, but most particularly with the wage earners who participate more fully in the monetary economy than settlers.

437 As regards labour services, almost all acquisitions are from subsistence villagers. Disposals in the subsistence sector naturally go largely to other villages although some help is given to settlers. In the cash sector, one-fifth of the labour services goes to settlers but none is received from them.

437 Most cash transactions are effected with organisations (52 per
434 cent of acquisitions and 77 per cent of disposals) but exchanges with other villagers are of secondary importance. Settlers and wage earners also play an important role as sources of cash. The largest item in transactions between villagers consisted of $36 paid out by the entrepreneur to the six men who worked for him on

[TEXT CONTINUED ON PAGE 267]

Table 11:18

Inputs: the circulation of goods and services by occupational category of partner
(percentages)

	Acquisitions						Disposal				
	Total	1	2	3	4	5	Total	1	2	3	5
	(lbs)						(lbs)				
Subsistence produce	14,032	85	9	5	-	1	14,088	78	7	8	6
deviant items:											
Xanthosoma	403	34	2	52	-	12	141	81	-	17	2
Fish	174	94	2	4	-	-	211	69	2	6	23
	(hrs)						(hrs)				
Labour services	631.2	98	-	2	-	-	439.9	93	6	1	-
Cash sector	52.8	97	-	3	-	-	53.1	79	21	-	-
Subsistence sector	578.4	98	-	2	-	-	386.8	95	4	1	-
	($)						($)				
Storebought goods	373.04	9	3	17	-	71	43.60	80	4	3	12
deviant items:											
Rice	56.74	15	7	39	-	39	12.94	82	6	1	11
Tinned fish	29.98	17	5	20	-	58	6.16	86	3	1	10
Tinned meat	17.00	17	5	34	-	44	1.30	100	-	-	-
Bread	17.50	12	1	9	-	78	3.08	81	13	-	6
Sugar	17.06	2	7	17	-	74	1.62	86	-	-	14
Tobacco	21.24	4	5	6	-	85	2.26	87	4	9	-
Flour	13.00	6	-	3	-	91	0.90	100	-	-	-
Clothing	77.04	5	-	14	-	81	6.70	100	-	-	-
Cartridges	7.22	10	8	3	-	79	4.50	100	-	-	-
Cash	337.34	21	11	13	4	32	340.70	19	-	4	77

1 = subsistence villagers; 2 = settlers; 3 = wage earners within Northern District; 4 = wage earners outside Northern District; 5 = organisations.

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Table 11:20

Inonda: destinations of main subsistence products discussed by the people

Item	Taro	Sweet potato	Yam	Banana	Pumpkin	Sago	Coconut	Sugar-cane	Corn	Areca	Fish	Wallaby	Pig	Total subsistence produce*	
Village	Percentage**													lbs	%
Inonda	70	72	85	75	74	86	56	69	81	74	58	67	67	9,940	71
Mahomo and Ajoro	4	5	2	1	6	7	3	2	1	3	1	20	-	470	3
Ijika	5	4	1	4	-	1	6	3	-	3	8	-	8	623	4
Sengara	1	2	-	3	-	-	-	-	-	-	1	-	-	110	1
Girua block	7	4	3	7	4	-	11	5	4	10	3	-	17	990	7
Hoeou	2	2	1	2	4	-	1	5	-	2	5	-	1	274	2
Sewa	1	1	1	-	-	3	2	1	-	1	-	-	-	131	1
Evundo	2	-	-	5	-	-	5	3	-	-	1	-	-	234	2
Urio	1	-	-	-	-	-	3	-	-	-	1	-	-	100	1
Popondetta	1	4	5	-	-	2	3	2	11	2	20	13	4	495	3
Ururu	5	1	1	1	10	1	1	1	1	-	1	-	-	384	3
All other places***	1	5	1	-	3	-	5	9	1	6	2	-	3	288	3
	100	100	100	98	101	100	98	100	99	101	101	100	100	14,090	100
Total in lbs	6,307	1,235	457	553	410	135	430	662	165	39	211	276	1,923		

* Including items not shown, ** Columns do not necessarily add to 100 due to rounding, *** Eighteen in all.

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437 on the western slopes of Mt Lamington some 13 miles away (but 40
438 miles by road). As will be seen by comparing Tables 11:20 and
439 11:22, links between Inonda villagers and kin who are in wage
employment in Ururu, Popondetta or on plantations are characterised
by an outflow of garden produce from Inonda and an inflow of store-
bought foods, clothing and cash. Many of the disposals to people
from places more than two miles distant take place in Inonda - a
string bag of vegetables weighing 35 lbs or more is rarely carried
for any great distance and this in itself ensures a comparatively
low volume of transactions of vegetable produce over distances
greater than three or four miles. One of the main items of long-
distance exchange is areca, which Inonda people receive mostly from
villages such as Sewa and Kendata higher on the slopes of Mt Lamington.

In general, about half the subsistence transactions with people in the above places is of taro, with sweet potato, banana, sugar-cane and pigmeat also prominent. The bulk of acquisitions from kin in Urio, however, was of sweet potato, which had been planted as a 'catch crop' on land cleared for cocoa trees. The Xanthosoma bought at the market formed two-thirds of the acquisitions from Popondetta and fish and game formed almost half of the disposals, these going almost entirely to the market. Half of the acquisitions from Ururu (the mission station at Popondetta) were bananas - presumably such a crop is most easily grown by mission staff with little time (and land) at their disposal.

437 (ii) Labour services. The Inonda people receive over half of all labour services from their co-residents while most of the others came from only three other places: Sewa, where the entrepreneur's mother's sister's sons live; Ijika, where there is a branch of one of the component lineages of the Andiriha clan; and Kendata, the home village of the wife of one Inonda man (see Table 11:21). In the case of Sewa and Kendata, young people came to stay with and assist their Inonda kin for periods of a few weeks; the Sewa men assisted particularly in sago-making and construction, but also in some tasks related to the cash sector. Disposals of labour services are mainly to Inonda people but a considerable amount of assistance in cash sector tasks goes to kin in Ijika and to settlers on the Girua block. It should be noted that, although no labour assistance is received from settlers, Inonda people receive more commodities, both traditional and non-traditional, from the settlers than they give to them.

439 (iii) Storebought goods. The distribution of transacting
366 partners for non-traditional goods differs greatly from that for garden and forest produce (see Table 11:22 and 11:23). The principal factor involved is the presence of trade stores as the main source of such goods. Thus, Popondetta, with several stores and within reasonably easy travelling distance, provides 40 per cent of Inonda people's total acquisitions of non-traditional goods,

Table 11:21

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Inonda: the geographical distribution of labour service transactions

Item	Acquisitions				Disposal			
	Labour, cash sector	Labour, subsistence sector	Total labour services		Labour, cash sector	Labour, subsistence sector	Total labour services	
Villages	Percentage		hours	%	Percentage		hours	%
Inonda	54	56	350.7	56	54	83	351.2	80
Nahemo and Ajoro	-	1	7.5	1	-	1	4.0	1
Ijika	21	3	27.2	4	19	7	36.7	8
Mosou	-	1	7.2	1	-	3	10.5	2
Sewa	22	29	179.5	28	-	-	-	-
Evundo	-	-	2.0	-	-	-	-	-
Popondetta	3	-	1.5	-	-	1	2.7	1
Ururu	-	1	8.0	1	-	-	-	-
Kendata	-	8	47.6	8	-	-	-	-
Girua block	-	-	-	-	21	4	27.5	6
Banga	-	-	-	-	-	-	3.0	1
Jonita	-	-	-	-	-	1	1.0	-
Urio	-	-	-	-	6	-	3.3	1
Total	100	99	631.2	99	100	100	439.9	100
Total hours	52.8	578.4			53.1	386.8		

although for some items the proportion derived from people or stores in Popondetta is considerably smaller. These latter include items widely-stocked in small village stores and items that circulate within the gift exchange system, such as rice, tinned fish and sweet biscuits. The prominence of Evundo as a source of non-traditional items was due to the opening of a store there in mid-1964 rather than to the links established with the road labourers' encampment. At both Ijika and the Girua block are trade stores where purchases were made, although gift exchanges were also effected with kin living there. Goods obtained from Saiho, Sangara and Ururu are exclusively gifts from kin in wage employment rather than purchases. As a result of the distribution of stores and of wage earning kin, over 55 per cent of the non-traditional goods acquired by Inonda people come from distances greater than five miles. Disposals by Inonda

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[TEXT CONTINUED ON PAGE 274]

8: Waddell & Krinks E-4,5 (1964-1965) 1964 0723 Orokaiva 0723

Table 11:22

Inonda: places of origin of main store-bought goods acquired by the people

Item	Rice	Tinned fish	Tinned meat	Bread	Sugar	Sweet biscuits	Alcoholic drinks	Snacks	Tobacco	Flour	Clothing	Cooking utensils	Other personal goods	Cartridges	Total	
Village	Percentage*														$	%
Inonda	29	30	9	22	20	40	28	18	83	3	7	-	84	12	91.76	25
Ijika	7	7	30	2	3	11	3	2	1	-	-	-	-	14	18.10	5
Girua block	7	7	6	1	12	6	-	2	5	-	2	-	-	12	14.82	4
Sova	1	1	-	-	-	1	-	1	-	-	-	-	-	-	3.46	1
Evundo	12	18	5	5	20	10	-	8	2	3	3	16	-	25	30.64	8
Popondetta	22	17	40	62	31	30	26	48	3	87	49	65	14	28	148.66	40
Ururu	6	2	7	3	7	5	29	-	1	2	-	6	-	-	12.58	3
Saiho	9	6	-	-	-	2	-	-	-	-	3	13	-	-	11.04	3
Sangara	5	5	-	1	1	-	-	-	2	-	3	-	-	-	9.60	3
Australia	-	-	-	-	-	-	-	-	-	-	28	-	-	-	21.34	6
All other places**	1	4	3	2	5	5	13	1	1	-	2	-	-	8	10.62	3
	99	97	100	98	99	100	99	100	98	99	101	100	100	99	372.84	101
Total in $	36.74	29.98	17.00	17.50	17.84	15.56	8.60	10.46	21.24	13.80	77.04	9.76	21.58	7.22		

* Columns may not add to 100 due to rounding.

** Sixteen in all.

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Table 11:23

Inonda: destinations of main storebought goods disposed by the sample

Item / Village	Rice	Tinned fish	Tinned meat	Bread	Sugar	Sweet biscuits	Snacks	Tobacco	Flour	Clothing	Cartridges	Total $	Total %
	Percentage*												
Inonda	69	75	54	70	81	56	56	34	87	40	100	25.84	60
Ijika	16	16	46	6	19	23	-	-	2	-	-	4.64	11
Sova	1	1	-	-	-	7	7	6	-	22	-	2.64	6
Urio	-	-	-	-	-	-	-	-	-	30	-	2.00	5
Oro Bay	-	-	-	-	-	-	-	-	-	-	-	2.32**	5
Girua block	6	3	-	13	-	12	-	4	-	-	-	1.94	4
All other places***	6	5	-	10	-	-	38	54	9	7	-	3.94	9
	98	100	100	99	100	98	101	98	98	99	100	43.32	100
Total in $	12.94	8.16	1.30	3.08	1.62	1.94	0.34	2.26	0.90	6.70	0.50		

* Columns may not add to 100 due to rounding.

** Copra only.

*** Fourteen in all.

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81 Waddell & Krinks E-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

Table 12:1

Sivepe and Inonda: the volume of transactions per man-week compared

Item	Acquired		Disposed	
	Total	Mean (per man-week)	Total	Mean (per man-week)
Sivepe				
Subsistence produce (lbs)	11,553.00	17.10	15,091.00	22.30
Cash crops ($)	-	-	71.60	0.11
Labour services (hrs)	1,170.00	1.70	1,108.00	1.60
Storebought goods ($)	314.16	0.46	25.43	0.04
Cash ($)	273.72	0.40	239.20	0.35
Inonda				
Subsistence produce (lbs)	14,032.00	35.30	14,088.00	35.40
Cash crops ($)	-	-	2.32	0.01
Labour services (hrs)	631.20	1.60	439.90	1.10
Storebought goods ($)	373.04	0.94	41.08	0.10
Cash ($)	337.36	0.85	340.70	0.86

Total man-weeks: Sivepe - 677.3
Inonda - 397.4

wage-labour force may be related to this local diversity, and the fact that it is readily exploited through the medium of exchange, both monetary and non-monetary. Compared with their Sivepe counterparts, the Inonda people dispose of twice the volume of subsistence produce through the monetary sector, with sales of fish and game in Popondetta predominating. With settlers a wide range of subsistence produce is exchanged, labour services are rendered and cash payments received, while wage earners, whose involvement in the cash economy is greater than that of the settlers, serve as important sources of storebought goods and cash, which may be reciprocated with subsistence produce.

At Sivepe there appears to be less incentive to develop exchange relationships outside the village context. Apart from lime and fish there is little subsistence produce not readily available locally. The demand for produce at Saiho market is limited, while the prices obtained discourage regular selling. The few wage earners residing in the neighbourhood have small incomes and invariably maintain their own gardens. Consequently they control few goods not directly available to the villagers themselves from their own resources.

434 184 Per capita, the Inonda people handle more than twice the amount of cash and storebought goods as do those in Sivepe. Furthermore, there are important differences in their respective income and expenditure patterns. In Inonda cash is derived from a wide range of activities, among which cash cropping is only of minor importance. Contracting and sales to the Administration provide the single most important source, accounting for almost one-fifth of total income. In Sivepe almost two-thirds (60 per cent) is derived from cash cropping and remittances. In both villages, but more particularly in Inonda, cash is acquired on a very irregular basis. Even with coffee, for which there is a defined buying season of about seven months, there are seldom more than three or four opportunities to sell and the villager has no way of predicting when these will occur. This, perhaps more than actual size of income, is a major determinant of expenditure patterns, making both budgeting and capital accumulation hazardous.

439 184 At Inonda, with its higher per capita income and fewer formal demands placed on it,[1] more is spent in trade stores than at Sivepe, yet this expenditure is distributed over a similar range of commodities. In both cases foodstuffs and stimulants account for almost two-thirds, with the balance being spent on a wide range of cheap clothing, household goods and tools. Little of this expenditure is of a 'luxury' nature for, among foodstuffs, flour in Inonda and rice in Sivepe are purchased either wholly or largely during the dry season to supplement the shortage of subsistence foods, tinned fish and meat serve partially to compensate for a general inadequacy of protein in the diet while, among other goods, cartridges, torches and batteries in Sivepe are purchased to improve the efficiency of hunting.

434 184 The excess of income over expenditure in Sivepe is also higher than in Inonda, as is the amount of investment in shares and bank deposits, suggesting that the larger incomes at Inonda are associated with a more rapid turn-over of cash. Even the entrepreneur there, who accounted for almost half (43 per cent) of his village's total income, registered a net credit at the end of the survey of only $5.02 on his household's cash balance. Only he, among all the villagers in the two samples, purchased a major item of capital equipment during the survey - a shotgun costing almost $50. This followed a cash payment of $42, for organising the construction of the researcher's house, rather than an extended period of saving from income.

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[1] The villagers did not contribute to the Papuan Church Fund during 1964, an item which accounts for 10 per cent of total expenditure in Sivepe and exceeds LGC tax payments in importance.

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The Land (Tenure Conversion) Ordinance of 1963 altered the tenure position by permitting the granting of individual title to any blockholder who desires it. By July 1964, 17 blockholders had applied for registration of their blocks as the first step to obtaining individual title. When conversion orders were made in favour of these applicants, their blocks were no longer subject to traditional tenure.

With the establishment of individual titles, a pattern seemed likely to develop of dispersed homesteads on smallholdings. In the original clearing no demarcation had been made of the fourth (rear) side of each block since by common agreement each blockholder was permitted to extend his area of cultivation by clearing additional forest on that side. Limits to such clearing were set by Epa and Ononda creeks to the south, and by the Gena and Seseko clan boundary markers to the north. This meant that there was room for extension of each block to a maximum of seven to ten acres.

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The initially cleared area of each block, about one and a half acres, was ready for planting with shade trees (leucaena glauca). By August 1964 each block had been planted with about an acre of shade and cocoa trees. In some poorly-drained sections, numbers of trees of both types had died but the drainage problem could, it was thought, be overcome by deep-ditching. Late in 1962 and early 1963 many young cocoa trees suffered a severe setback as a result of infestation by army worm (tiracola plaviata). Marked irregularity was noticeable in the growth of the cocoa trees: this may be attributed to the depredations of army worm and, to some extent, to micro-variations in soils or topography.

The irregularity of tree growth was reflected in the wide variation in production from block to block. Production of cocoa had commenced at Ononda almost exactly four years from the inception of the scheme. Many blockholders had not, in August 1964, started to pick their cocoa but others were already harvesting regularly and systematically. No attempt had yet been made to establish a co-operative fermentary on the site provided. Instead, [439] the Popondetta Cocoa Fermentary Pty Ltd made a monthly trip to [435] collect wet beans from Ononda and two other centres. The price in August 1964 for wet beans at the fermentary was 5½ d. per pound. The price paid at the villages was 3 d. per pound, 2½ d. per pound being deducted for collection expenses.

[434] Cash income earned by the Yega from cocoa was still very small. Work time expended by Yega villagers varied widely. In a few instances pods were picked the previous day but most people picked and opened pods on the morning of the collection. Pods were opened under the trees on the blocks; the wet beans were then carried in cooking pots, basins or sacks about half a mile to the collection

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Yega Scheme cocoa blocks looking N.W., January 1963.

Yega workers resting under shade trees. Cocoa trees 18 months old, February 1962.

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Harvesting cocoa pods, July 1964.

Selling wet cocoa beans to fermentary representative, July 1964.

Table 2

245 242 423 162 464 Ages of blockholders in the Yega Scheme compared to other Yega men of working age

Age grouping	Men with cocoa block		Men without cocoa block		Men working away from villages	
	No	%	No	%	No	%
Under 30	7	15	13	20	53	62
Over 30 and under 40	16	35	17	26	23	27
Over 40 and under 50	17	37	17	26	6	7
Over 50	6	13	18	28	3	4
Total	46	100	65	100	85	100

Note. Ages are in most cases estimates and for the last category estimates by informants.

Table 2 indicates that, of the 46 cocoa blocks in the Yega Scheme, 33 (or 72 per cent) were held by men aged 30 to 50, slightly more than half of whom were over 40. Only 28 per cent of the persons allocated blocks were either under 30 or over 50 but nearly half the persons not allocated blocks were in these groups. The larger number of old men without blocks is understandable. They had few needs other than food and betal nut and the cost of small luxuries like sugar and rice could usually be provided by their sons. On the other hand, there was a very strong desire to obtain cocoa blocks on the part of middle-aged men who did not yet have them. There were few men aged 40 years or over working away from the village, though most of them had been away during their youth. The table emphasizes the distinct preference of young Yega men to work for wages away from home rather than to remain in the village: 89 per cent of the men working away from the village were under 40. Other data showed that 79 per cent of all bachelors over 16 years of age were working away from home or had recently returned from wage employment.

434 In addition to their earnings from cocoa production, Yega villagers had four sources of income.

(439) (444) i. Exchanging surplus agricultural produce with the mission, which gave tobacco, razor blades, needles, fish hooks, salt, etc. in exchange to the value of one penny per pound weight of produce. This mission barter enabled the Yega to obtain small useful items with no loss of time, for even though prices at the Popondetta market were about three times higher, to get there required about half a day's walk in each direction carrying the produce.

434 438 ii. The marketing of agricultural and marine products and handicrafts. Yega participation in the Popondetta market held

of Orewo lineage of the Kurou clan of Yega, who had been educated to Standard IV at Gona Mission School and had spent the year before the war working at Bunting's store at Cape Killerton. Just prior to the war he joined the Papuan Infantry Battalion and became a corporal. During the war an Australian soldier with whom he was friendly convinced him of the possibility of raising money from short-term crops. The Administration had introduced copra-making much earlier, but prices were low and there was little enthusiasm for the crop.

Even before the formation of the G.P.T., Samuel had convinced most of the Yega of the desirability of co-operative farming. Subscriptions were called for: money was available from war damage compensation and most Yega households subscribed from $10 to $20, each person contributing as much as he wished.

Clearing bush for the co-operative gardens was begun at four sites in mature rain forest at Ononda, Garara, Mumburada and Ingaba-Betari. Little information was available on the subsequent operations at Mumburada and Ingaba-Betari but some details were obtained for the Ononda and Garara projects.

Samuel placed an ex-serviceman comrade in charge at Ononda. A site was selected by Nixon Kairembora, the Yega 'land custodian', between Ononda and Epa Creeks.[1] Meanwhile some of the neighbouring Beuru and Ahora people obtained Samuel's consent to join the Yega in their co-operative efforts, paid him money and were permitted by him to assist with the clearing of bush at Ononda.[2]

Crops were planted at Ononda by co-operative effort for two years. The man in charge says that good crops of peanuts were grown and sold to the Administration, being taken by headload to the coast, thence by canoe to Cape Killerton. The money from the sale of these crops was paid to Samuel Ungega who banked it at Higaturu. Unfortunately, no records of the amounts obtained are now available.[3] Large quantities of sweet potatoes were also

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[1] For the history of this land see pages 30 and 48 and Fig.7 of the previous article.

[2] When asked whether the fact that the Ahora and Beuru had cleared bush at Ononda would strengthen their claims to the land the Yega replied in the negative. They stated that non-Yega were employed only in the capacity of workmen: they were paid in produce at the time and had no further rights.

[3] One of Samuel's brothers, who was a young boy at the time of Samuel's death in the Mt Lamington eruption, said he remembered numbers of Samuel's books being burned and thrown away in the bush when relatives went through his belongings.

CHAPTER 1 - INTRODUCTORY

Location and facilities

131 Inonda is situated about eleven miles from Popondetta on the Oro Bay road. Up to the present, access to Popondetta has been dependent on the state of the Girua river but with the completion of a bridge later this year all-weather access will be ensured. Inonda lies within the Orokaiva culture area and is served by the Higaturu Local Government Council. Administration patrols visit the village once or twice annually.

368 [811] [787] The nearest school is about six miles away across the river at Hohota. Some children attend this school spasmodically and a few board at church schools at Popondetta or Embi. Others do not go to school at all. There is an Anglican church in the village though it is little used except when an itinerant priest happens to be passing by.

498 [366] 439 Kerosene, tobacco, sugar, salt and other household requirements are usually purchased from a small trade store about three miles distant but larger purchases are made in Popondetta. There are four main items of traditional trade which appear to follow particular routes. As betel nuts do not grow well in Inonda these are bartered or purchased from inland tribes (usually through relatives) and the lime which is chewed with them is acquired from the coast. Traditional valuables (hambo) are acquired most frequently by barter with the coastal people, but birds' feathers for making head-dresses (di) are obtained from the Managalas tribes in the mountains in exchange for dogs, money and other items. The advent of shotguns has reduced the trade in feathers to those of birds of paradise and other relatively rare species. In bygone days clay pots and wooden bowls were traded from the coast in return for feathers and other valuables but with the advent of cheap imported utensils this trade has ceased.

Physical features

133 Topography: The Inonda lands lie partly on the flood plains of the Girua and Sambogo rivers and partly in the

informal 'company' was formed to operate the enterprise. There were sixteen shareholders, all residents of A's hamlet or the absent sons of residents. A contributed $144 in cash while the others contributed $10 each. This money is used as working capital and placed in a Cocoa Account at the savings bank. It is controlled by A's eldest son, who is referred to as chairman of the company and is generally responsible for the handling and marketing of produce.

Wet cocoa beans were bought from villagers from moneys in the Cocoa Account at 3 cents per pound and fermented and dried. They were shipped through a local trading firm and sold on the London market. The fermentary has not been very successful because most villagers outside A's hamlet sold to a European fermentary which collected the beans and paid a higher price. Another, and perhaps more important, reason that the local fermentary was not patronised lay in tensions and divided loyalties within the neighbouring villages. From early 1962 until May 1963 only 7,080 pounds of wet cocoa beans were processed using the temporary fermentary. No later figures are available but the credit balance in the Cocoa Account rose from $174.07 in June 1963 to $470 in January 1966.

All four entrepreneurs aspire to owning a motor vehicle. A's early attempts were declined by officials,[1] and his attempt to establish a bus service in 1963 (for which he had sufficient finance) was thwarted when the only licence was granted to an expatriate. He still gives top priority to buying a vehicle for his own cartage and for hire. B had the funds but not the driving skill.

The difficulty of acquiring a skill such as driving is often overlooked. For a person in a rural area it is usually necessary to go to a town and get a job. Even then one may spend several years in an unskilled job without getting the opportunity to learn to drive. Few Papuans have vehicles and most people are naturally reluctant to allow others to practise on their vehicles. B's son has now tried unsuccessfully for three years to find an opportunity to learn to drive. C and D have each been seeking a cheap second-hand vehicle for some time, but the likelihood of establishing a successful carrying business is doubtful, for overheads are high, business would probably be irregular and many of the potential customers would have difficulty in paying. In the long term, as incomes rise, there will certainly be openings for such ventures. In the meantime, however, there is a danger that a transport business would survive only if it was subsidised in part at least from

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[1] Official approval was then necessary for indigenous people to go into debt.

383 654 and later to be provided by the people themselves. This idea was taken up by the villagers and the first bush rubber processed at Ombi-Tara was purchased by the Department of Agriculture on 3 June 1964.

●[439] An Agricultural Assistant was stationed full time at Ombi-Tara and he helps to grade, weigh and bale the rubber.[1] The baled rubber is purchased monthly by an Agricultural Officer who drives to Ombi-Tara from Popondetta. It is marketed in Australia through the Papuan Rubber Pool.

249 434 Tapping is organised on a rotation system, with one man tapping the bush rubber stand each month, producing between 70 and 200 lb of Ribbed Smoked Sheet, and earning between $12 and $34, depending of his diligence and the price of rubber.

383 474 [654] In mid 1964 the villagers built a smoke house, a machine house and a baling house, all of local materials, for the equipment on loan from the Department of Agriculture. The baling press was provided on permanent loan by a local planter.

[402] [454] On 27 October 1964 an Ombi-Tara Village Savings Account was opened at a bank in Popondetta with the sum of $227.50. During the following year money was paid in at irregular intervals at an average rate of about $14 per month.

On 12 February 1965 the Ombi-Tara people paid $177.72 for their own rollers and coagulating pans which they now use for processing, leaving the Department of Agriculture free to transfer its equipment to another recently initiated scheme. Extra coagulating pans were bought for $91.20 on 16 October 1965, leaving a balance of $117.84 in the village account.

[651] No deposits were made between October 1965 and the end of January 1966 because of the need to save money to pay the Local Government Council tax ($5 per man) and the Mission jubilee contribution ($2 per householder).

243 [797] While the bush rubber processing project appears to have been a success, almost every other attempt made by the Ombi-Tara people at planting cash crops has failed. They participated in a communal rice growing project in 1950, encouraged by the Anglican Mission, but it was a failure, as were similar projects in other parts of the district. Later in the 1950s a communal cocoa plantation of some 400 trees was established with Administration encouragement. Disputes over the organisation of work and the distribution of proceeds caused the abandonment of the project shortly afterwards.[2]

245 [654]

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[1] During our stay all rubber processed at Ombi-Tara was graded Ribbed Smoked Sheet No.2.

[2] On the communal rice and cocoa experiments in the Northern District see Crocombe 1964a:29-33.

Appendix B

The Ombi-Tara environment and population

131 Ombi village is in the Kokoda sub-district about twenty-seven
[133] miles from Popondetta along the main Popondetta-Kokoda road. It is situated on top of a plateau up a steep escarpment, about 250 yards from the main road. Tara is about two miles from Ombi and straddles the access road which runs through the converted land occupying part of two of the blocks. It was previously about two miles further away and was moved to its present site in 1964 after survey of the land to be converted was under way.

133 The Kumusi River flows close to the Popondetta-Kokoda road,
[361] about four hundred yards from Ombi village. Ombi village was formerly sited next to the river but was moved to its present higher location in about 1957, reportedly to escape the mosquitoes.

871 The nearest school is conducted by the Administration at Ajeka,
972 about two miles away. Most children of the appropriate age attend
[368] school daily. Several of the older children board at schools in Popondetta while some children do not attend school at all.

366 The nearest trade store is at Ajeka but this is seldom open,
438 and most purchases are made from the store operated by a European
439 planter at Awala, a distance of seven miles. Clothing and larger items are purchased in Popondetta.

134 The Ombi-Tara lands are part of the Higatura land system which contains a considerable proportion of good land with reasonably fertile soils, suitable for many arable or tree crops as well as pasture.[1]

132 The most important features of the climate are the generally
137 heavy rainfall, and the almost uniformly high temperatures and humidities throughout the year. Rainfall ranges from 120 to 150 inches annually and may well be greater in the higher areas, including Ombi-Tara. These climatic features are reflected in abundant plant growth. At Ombi-Tara rainforest covers much of the surrounding land, which is marked by a series of steep ridges.

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[1] See C.S.I.R.O. 1964.

353 [415] *tapa* cloths, also worn on ceremonial occasions; often nowadays mother's best dress and father's best shorts and shirt are also kept in this box. Everyday tools—fishing spears, pig spear, bush knife, and axe—are stored between the floor joists under the floor platform. A [372] bundle of dry firewood may be stored under the house in case of a prolonged spell of wet [227] weather. The dwelling of each clan fishing-leader is easily recognized by the large seine net hung to dry under the eaves or rolled in a corner of the verandah.

342 The Yega build one other form of dwelling, a garden shelter (*dobo*) usually roughly constructed with leaf walls, frequently open at one end and often so low from floor to roof that a person cannot stand erect in it. A *dobo* is a temporary dwelling, built near the swidden in current use, and used by a man and his family for up to a week at a time while they are working in their gardens, which may be three or four miles from the village. The *dobo* is also used to shelter from rain or to take a siesta during shorter, one-day visits to the garden.

343 [461] [614] [621] [584] A *gaga* is simply a talking platform where men sit for a chat, a chew (of betelnut) or a smoke during siesta time, or after the day's work is done. There is usually at least one *gaga* for each clan in a village. The *gaga* performs an important social function for it is here that quarrels are settled, marriages arranged, and the everyday problems and business of the village discussed and finalised.

291 Everyday clothing is a pair of shorts and maybe a shirt or a singlet for boys and men, and a cotton dress or skirt for girls and women. [289] The traditional body covering for both men and women was beaten out bark-cloth of the [171] paper mulberry tree. This is used throughout the Pacific and is known as *tapa*. *Tapa* skirts and loin cloths are still worn on special occasions, such as weddings and New Year singsings, while many older people wear *tapa* to 323 church on Sundays. The Yega and their neigh- [289] bours are expert tapa-makers but they did not have either the suitable clay or the art of pot-making. They used to trade their *tapa* for pots ● 439 from Ambasi, thirty miles to the north, and [198] from Wanigela, 100 miles to the south. This trade has now declined because everybody can

[P 11-A)

[TEXT CONTINUED ON PAGE 12-A]

439 buy cheap cloth and durable iron or
178 aluminium pots at the trade stores. Although
every housewife now has two or three large
415 manufactured pots, she keeps them for cook-
252 ing the food for feasts. Most of the daily meals
[437] are still prepared in clay pots but few of these
[431] pots were obtained by the old barter methods;
most were obtained as gifts from friends or
585 relatives. At one wedding, for example, the
431 bride received fourteen clay cooking pots, in
addition to a large supply of mats, string bags,
enamel plates, and dishes: enough to last for
years to come.

ECONOMIC CHANGE AND THE PATTERN OF SETTLEMENT

178 A very close relationship exists between
361 economic change, particularly the planting of
cash crops, and changes in the pattern of
settlement. Although most development has
[173] occurred in the last twenty years, there is evi-
dence, supported by the oral traditions of Yega
elders, to show that some evolution of settle-
ment had occurred even before the first con-
173 tact with white men. By tradition the Yega
361 were sea people. This probably means that
they arrived as migrants and originally spent
most of their time aboard their canoes and
lived mainly upon seafood. They settled first on
three small islands, Baroda Deuga, about half
a mile north-east of Waususu Point (Fig. 9).
[133] These islands are today only a few feet above
high tide and are composed entirely of coarse

[P.12-A]

361 423 He has now cleared bush and planted gardens all round and claims, by right of usage, a much larger area than was originally allocated to him. The establishment of freehold title must reinforce dispersal, so it is significant that in August 1964 seventeen Yega cocoa-block holders were among the first people in New Guinea to apply for freehold title. The parish elders did not oppose these applications.

245 458 Yega expectations in cocoa plantings as a source of cash income have not been fulfilled. The trees began to bear in mid-1964, at a time when, unfortunately, the world market was depressed. Growers received only three cents [439] per pound for wet beans from a European-managed fermentary near Popondetta; by mid-1965 the price had fallen even lower, to two 245 433 cents per pound. The discouraging effect of such prices was reflected in the low production of cocoa during the latter half of 1966, when forty-eight growers produced only 1,866 pounds of wet beans valued at $74.64, an average of under $2 per head. By January 1967, the well-cared for plantations of 1964 looked overgrown and neglected and it was obvious that apathy had replaced the early enthusiasm.

245 178 The Yega cocoa-growing scheme outlined above well illustrates the conflicting traditional and modern socio-economic attitudes commonly found in New Guinea today. Traditional aspects are:

245 178 423 467 [426] a) The use of communal labour to clear the rain forest and the subdivision of the area among those who helped.

b) The absence of any documentary record of the transference of cultivation rights to individuals.

c) The organization of group labour for certain tasks—individual right-holders to cocoa blocks were assisted by their kin in tasks such as cutting grass and opening the cocoa pods—and the subsequent obligation on the right-holder to repay such work by sharing his profits.

d) Personal control by each individual of the economic trees which he planted on his block.

245 177 Aspects which have little precedent in traditional custom but result rather from the acceptance of new principles are:

a) The systematic layout of blocks.

[P.16-A]

planting is already completed for when the old people see the tauga leaves drop over the newly planted gardens they say that the taro will have good leaves; their virtue is said to come from the tauga leaves that drop. The driest part of the year is now at hand and few taro shoots suitable for planting are developing; hence, the best planting time is past.

6. The flowering of the tauga announces the beginning of the rainy season. This falls around the beginning of October.

7. At about Christmas, immature tauga nuts begin to fall from the trees. This is the beginning of the time of shortage and also the occasion of some further garden magic to encourage the swelling of the main taro crop. Some minor feasts occur around this time. People then begin to look forward to the time the garepa will flower again.

We may compare this with Heddell's statistical data, which compares man-weeks spent on all types of activities in Sivepa over the periods 3 February-3 May, 1964; 20 July-6 September, 1964; and 9 November, 1964-3 January, 1965. His figures do not rally particularly closely with the idealogical pattern set out by informants and he explains this by an untypical rainfall pattern in 1964; it was unusually dry.

Rainfall fluctuations have a profound effect on the yield of the main crop taro. Because of the porosity of the ground, very heavy rainfall is needed to ensure a good harvest. Feasts can be held only in years when the rainfall has been good and the harvest accordingly abundant. In other years people are close to starvation level in the months before the harvest. It is then they rely on supplementary crops such as sago.

In recent years, two further calendars have become superimposed upon the traditional one: that of the Christian festivals and that of the European economy, notably monthly coffee sales from June to December and the payment of Local Government Council tax supposedly in September.

Section 3: Topography

In this section I shall specifically describe the differences in topography between Sivepa and Inonda, but this description will illustrate at the same time the fundamental differences between the ecological base of Orokaiva mountain settlements such as are found on the slopes of Mount Lamington and of the plains settlements found North and East of the mountain. I have drawn my data from a regional land and soil survey done by the Commonwealth Scientific and Industrial Research Organisation in 1954, as well as from remarks of Crocombe and Hogbin (1963) and Rimoldi (1966).

231 they marauded gardens, so that I assume that a good number could be rounded up if Sivepe were to hold a major feast. They were not at all accessible, however, and none were caught during such hunting [422] expeditions as the people organised. On the occasions when marauding pigs were shot, the pigs were always recognized and presented by the killer to the owner who then presented his pig to some other person. No doubt these pigs were a resource and perhaps I was at fault for not taking a census, but with no pigs visibly in evidence, I considered these assets as too shadowy. In Inonda, where Crocombe and Hogbin reported 12 pigs in 1962, only two were left in 1966.
235 My prognosis for pigs as an economic resource is poor. The fowl [262] population, on the other hand, had remained very much as it was at these earlier investigations: eggs were discovered and eaten occasionally, but the use of the fowl was for feasting when visitors [239] had to be entertained. It was also noticeable that the roosters were deprived of many of their choicest feathers at a time when [295] headdresses had to be refurbished for dancing or spears decorated. [411] At a visit from Togahou, which by traditional etiquette, as I understand it, should have rated at least one pig, the people of [599] Sivepe killed only fowls. This was, I was told, because there were no pigs available; hence the fowls were a proper substitute. It would seem that the fowl is rapidly becoming the substitute for the pig on many ceremonial occasions, though not yet for all occasions.

There is a great shortage of both pigs and fowls for these 438 ceremonial occasions. Pigs are bought for high prices ($20 to 439 $30)--from neighboring villages and even, as Crocombe and Hogbin say, from European planters. Fowls tend to be made available on [435] big occasions by whoever has them so that their number does not increase--a few dozen in each of the two villages.

We may distinguish, among local plant resources which yield 241 economic products, those plants which are native to the district 311 and those which have been introduced by Europeans for cash cropping purposes. Starting our survey with the former of these two categories, we shall deal first with food plants and next with economic trees. I have tabulated average food plants per household as shown for Rimoldi's Sivepe sample and as shown by Crocombe and Hogbin for Inonda (Table 7).[A] The pattern for the two places is remarkably similar except that sweet potato is a notably more important crop at Inonda than at Sivepe. The reason for this is that it is more dependable under drought conditions such as often occur at Inonda and also, it seems to do better at Inonda. The fact that the Inonda taro acreage is higher than the Sivepe acreage reflects no more than the higher yield per acre in the latter place. There is no evidence that any major change occurred in the quantities grown or the methods of cultivation over the period with which we are concerned, though a small increase in the consumption of Xantosoma taro may be a symptom that people may be starting to

A [See Cat. 116, p. 212--Analyst]

177 the children are principally concerned while some older people are still averse to contacts with medical personnel.

Section 7: Contacts With Chinese

563 439 At the time of the eruption there were, as far as I know, no Chinese in the Northern District. By 1966, five Chinese families had settled in Popondetta, all of them as traders. They had migrated from Rabaul and Lae, where they have trade connections. In the two years or so since their arrival, they developed considerable trade connections among the Papuans. I found that both at Sivepe and Inonda, people preferred to deal at the Chinese shops rather than at the two large established European concerns.

The main reason I was given for this preference was that the Chinese shops offered goods at lower prices. It was certainly true that these shops had a far greater range of low-priced clothing of the type Papuans like to buy. There were, however, other factors. When I had occasion to buy low-priced clothing of the favoured type, I found that the two European stores actually had some rather good stock and that the price was not actually higher. I even found that some lines were more expensive in some of the Chinese shops. This applied particularly to tinned food which the Papuans also bought.

The two European stores were certainly full of goods well beyond the means of the Papuans; when they traded there, they would have to be very careful to pick items of the right sort of price. The main trade of the European shops was with Europeans who put through relatively large orders usually on credit. The Papuan who went there with a few shillings to spend could not help but feel his economic inferiority. In one of the shops, I occasionally saw cartoons displayed which had a racist bias. In the Chinese stores, salesmen were exclusively Papuan and by no means gave preferential treatment to Europeans who went shopping there. Papuans felt much more at ease there. Furthermore, a Papuan who had a regular income or who was known to the owner and grew coffee, could get credit at the Chinese shops.

[245] [494] One of the Chinese stores introduced several new features in his business. He bought coffee from Orokaiva growers which he sent over to Lae for processing. His price was a little lower than that of the coffee cooperative, but people sold coffee to him nevertheless. Sometimes, the reason was that the cooperative bought only once a month during a scheduled visit to each district, and people might wish to sell at other times. In other cases, the reason was that only members of the cooperative could sell to the cooperative and many small growers were not members (the entrance fee had risen to $16 by 1966). Furthermore, the coffee could be used to pay debts incurred with the Chinese store.

563 More important was the encouragement given by the Chinese
● 937 store to the development of Papuan-owned trade stores in the villages.
443 Village trade stores have existed in the Northern District for a long time but traditionally they were built by planters who sought extra income by selling trade goods to their employees and villagers in the vicinity. The shopkeeper was a closely-supervised Papuan on wages. In 1966, I counted some 20 of these stores between Inonda and Sivepa. Fourteen of these were owned by various planters, but the other six were of the new type promoted by the Chinese trader. Here the owner of the store was Orokaiva and the Chinese supplied trade goods and transport, if needed, at some extra cost.

During the year I was in the field, it became the ambition of many villages to have their own trade store. In the Sasembata [559] area alone, at least four new ones were started. The arguments in favour of them were: that the village store might as well have the profits instead of these all going to the Europeans; that one would not need to walk so far to buy goods; that the village store would sell goods at all hours, instead of only during the day. There was a strong ideological motive as well, to be discussed later. The stores were an avenue, above all, to greater power. Inonda was served by a planter-owned trade store two miles from the village.

Hence, the role of the Chinese in the Northern District was a rather interesting one. It was they who opened to the Orokaiva the opportunity of trading. The Chinese, indeed, gave wholesale discounts to all these small shops and treated the traders without condescension. Every few weeks, the Chinese truck delivered supplies to the shops in the Sasembata area. It was then, too, that it collected coffee. The storekeepers also visited Popondetta to collect the supplies when they could, occasionally with the clandestine help of a government driver.

Section 8: Contact With the "Taupa"

177 In the previous sections I have sketched the network of
366 contacts characteristic of Sivepa village at the time of the eruption
368 and the present, and compared these with Inonda. The comparison cannot usefully be carried too far, as Inonda is much closer to Popondetta than Sivepa, while the small size of Inonda and its longer distance from even a minor educational, and medical centre and from a mission station introduces ecological elements reducing cultural contact. A general difference between the two places, resulting from these factors, is that the locale of contact for the people of Sivepa is most often the village, or a place only a mile or so from the village (the mission station, or Garoubi, or Sasembata village), the locale of contact for the Inonda people is 177 more often Popondetta. Another difference is that whereas Sivepa,
795

177 the people. He was the only white man in the district (omitting
[464] the anthropologists) who actually did this. Finally, some people of Ssombata district were familiar with taupa as workers and in personal service, as cookboys, housegirls, etc. outside the village.

[875] The only taupa residents in the district were the head teacher and his wife; they had daily personal contact with village
[939] people especially because they bought vegetable produce for the mission, while people also approached them with a multitude of minor problems, e.g., pressure lamps that did not work, troubles at school, help needed with sports or the sewing programme of the women's club, etc. Most Sivepa men and nearly all the women were too shy to approach them. The head teacher used the Papuan priest as an intermediary when he had to approach Sivepa men when help was needed for school buildings, or when land was needed for the gardens of the mission teachers. The other taupa came to the district no more often than once or twice a year; the doctor attended patients only at Saiho; the magistrate sat at Higaturu; the nearest white planter was at Awala.

657 Characteristically, contact between the taupa and villagers
177 occurs either through the mediation of Papuan functionaries--and it is thus that basic ideas are mostly communicated to Orokaiva leaders and groups--or directly, when taupa finds it inexpedient to
[242] delegate decisions on problems affecting individuals. This tendency to deal with individuals rather than leaders or corporate groups is self-evident from the roles of many taupa (educational, medical, judicial) but I noticed it also in, for instance, agricultural extension work. Here the emphasis was on the educating of individual growers. The administration is not in favour of cooperative cash-cropping ventures, so that dealings are of necessity mostly with individuals. When it is desired to indoctrinate groups, the most useful channel at the present time is the Higaturu Council, so that the taupa's message reaches the people through an Orokaiva intermediary. The patrol officer, when visiting a village, for instance for census purposes, tends to deal with his audience in three types of ways: (a) he deals directly with the "committee" for the formal arrangements of calling the people together and to obtain what facilities he needs for his work; (b) he makes a speech expressing the desires of the government, to the assembled people; (c) he addresses individually those individuals against whom he has complaints, and he does this in front of the assembled people. These individuals, on the occasion I witnessed, received a reprimand, but they might also be arrested and jailed. This kind of meeting is held yearly in every village.

Undoubtedly, the patrol officer consults both with the councillor and the committee member in charge of the village. It was clear from his treatment of the complaints on his list that he had not only consulted, but also trusted these two local leaders. The cases with which he dealt were all connected with the policy of

plus other amounts of unknown size--enough for the projected establishment of a trade store. Rimoldi's report suggests that cooperation between the villages for this project was difficult to attain; the mission teacher who was to coordinate the project withdrew. (1963: 107-108) After Rimoldi left, one of the Sivepe clans (Jegase) evidently went ahead with some scheme to open a trade store at Sivepe and lost all its money. There was some dishonesty on the part of someone, but I did not try to explore this. When I arrived, the plan to open a trade store was still alive, but people did not like the idea of its being operated by a clan; one of the families of the Jegase clan was playing with the idea of raising some money and starting one. It seems likely that the savings accumulated by the Timuma clan, to which Rimoldi refers, were lost along with the Jegase savings.

In 1966, two group savings accounts were in operation. People had no project in mind for which these savings were intended, but it was felt to be salutary to have savings because there would be no chance otherwise, as I was told, to reach equal status with Europeans. One of these savings accounts was for the whole village, and this is probably the one opened in 1961, referred to by Rimoldi. In 1966, when these bonds matured, the Soho clan leader brought all the money home in two-dollar bills and handed these to each contributor at a meeting. Most of the contributors handed their money back for later investment. The second savings account was operated by one clan, for the purpose of its own bride price and similar payments; as it was clan money, the facts about it were secret. The village fund contained $158.

The only cooperative effort known to me at Inonda was a regular arrangement by which vegetables grown at Inonda were carted to the Ambi Hospital and sold there, in 1967. Towards the end of 1966, some vegetables were sold in the same way to the government in Popondetta. In this case, the proceeds were shared between individual growers. The arrangement was the result of contact between the man who had become a government driver and the appropriate authorities. The carrier was an affine.

Finally, a notable aspect of social organisation in the post-eruption period is the emergence of leaders whose authority rests on two sources: status in traditional terms and status conferred by Australian-sponsored organisations. The village constables could sometimes be so classified, at least superficially. Only on rare instances, however, were they champions of Western values who sought to influence the minds of the people towards acceptance of these values. They did not ask their people to accept Australian organisations as a source of authority (if Weber's definition of this term be accepted) but only to recognise them as an effective source of compulsion. The people of Sivepe, as well as Mohorita werevery much aware that the position of the councillors and committees, successors of the village constables, was very different. The councillor's job was to preach the doctrine of the "new way;" people would tell me how bored they

731 the resettlement villages as needed, but soon replaced by issues of
657 the sweet potatoes and later, village-grown crops. Distributions tapered off after May, 1951, and ceased at the end of that year.

Commercial Enterprises: Agricultural activities are the only kind of enterprise which are encouraged or assisted by government. These activities are mostly conducted by individual entrepreneurs. No rewards are ever given for land clearing, nor are any labour costs ever paid. The government assists by providing coffee, rubber and cocoa seeds to growers. Initially these were free; nowadays, growers are charged the cost of seed.

452 Although there is provision in the Territory for credit assistance
657 for economic development, small growers of cash crops such as are found in Sivepa and Inonda are not eligible for this credit. A short time before I left, one man from Inonda (again the government driver) was encouraged to apply for a loan under a new experimental scheme for beef cattle farming, but the arrangements were not complete when I left.

245 The government provides marketing assistance to New Guinea
652 growers of coffee (mainly indigenous) by a remission of duty on raw coffee imported into Australia from sources other than Papua and New Guinea to each importer who obtains a certain percentage of his total requirements from the Territory. The government does not itself
245 purchase coffee but when the Higaturu Local Government Council was
479 formed one of its initial functions was to operate a cooperative for
[691] the purchase, processing and exporting of locally grown coffee. Later (in 1962), the Council withdrew from this activity and an independent Orokaiva Coffee Growers Society was formed. The reason for the Council's withdrawal was advice from the government which felt uneasy about local bodies engaging in commerical activities. The effect of the setting up of the cooperative has been that service is now no longer given to all growers but to all who have bought shares as an entrance fee and become members of the cooperative. This fee was initially $4 but is constantly rising until in 1966 it reached $20. Some non-members sold
[439] their coffee to the Chinese for a lower price; others sold through kinsmen who were members, and did not always receive the full proceeds. The government keeps an eye on the operations of the cooperative; in any case, it seemed well enough conducted. Until end 1966, the cooperative depended on the government for transport: the buyer who visited villages each month to collect and pay for the coffee travelled on a government truck. It is now buying trucks of its own. The nearest pick-up point for Sivepa coffee was Carombi, one mile away; the nearest pick-up point for Inonda coffee was likewise one mile away, at Ajoro.

651 The government also assists agriculture through its research
292 activities conducted in various experimental stations in the Territory which specialise in rubber, coffee and other relevant crops. A resources survey has been made of large parts of the Northern District, including the Oro-Bay--Kumusi River region with which we are concerned here. A programme for the improvement of Robusta coffee is on the way,